

Fleming Symposium: Update on Quality and Patient Safety

September 12th, 2019

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Sr VP, Chief Quality and Patient Safety Officer

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888-402-LVHN LVHN.org

Agenda

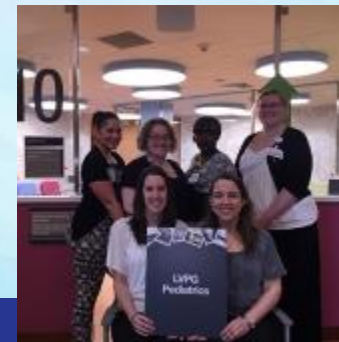
- Two Parts
 - Part one
 - Trends in Quality and Patient Safety
 - Expensive, unsafe, highly variable
 - Prices, administrative burden, over utilization
 - Pathways, Dashboards, Feedback
 - Part two
 - Wellness

Lehigh Valley Health Network

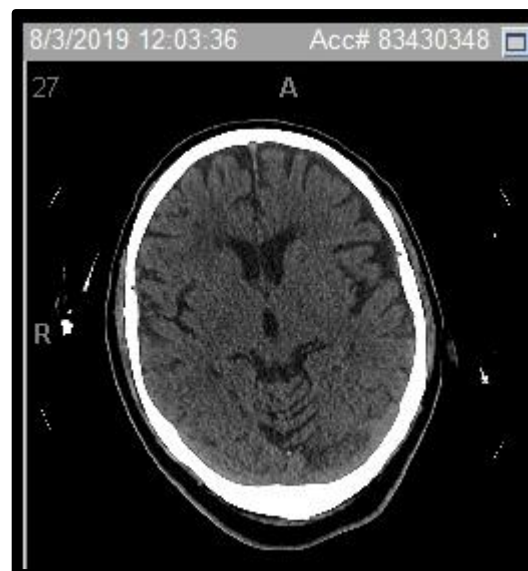
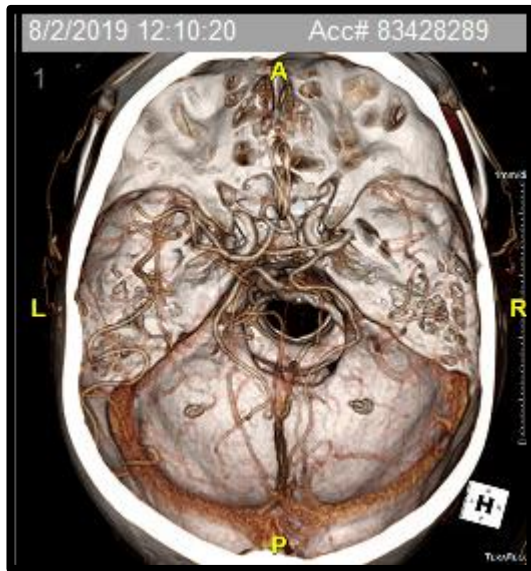


- 2,005 Physicians
- 834 Advanced Practice Clinicians
- 4,208 Registered Nurses

- 17,000+ Employees
- 1,200+ volunteers
- Four Time Magnet



70 year old man with CAD and a known cardiomyopathy. His wife was being seen in the LVPG Muhlenberg Cardiology office on 8/2/19 and he was in the waiting room. The MA noticed he had aphasia, dysarthria, gaze deviation, left hemianopsia, left hemiplegia, left-sided sensory loss, and gait difficulty. He was emergently transferred to the LVH M ED. CTA showed right MCA M1 occlusion. TPA was given at 29 minutes. Cardio embolus was suspected and he was transferred to the LVH CC IR lab. Clot removed. CT Head the following day showed no stroke. Echo demonstrated intracardiac thrombus. NIHSS was 23 On arrival and 0 on discharge to home four days later.



81 year old man with HTN, CKD 3, CAD, OSA and hyperlipidemia. On 5/23/17 he underwent a cystoscopy which showed bladder cancer. On 11/13/17 he received a robotic-assisted laparoscopic cystectomy with ilealconduit formation. In January of 2019, he was found to left hydronephrosis due a mid urethra stricture. Nephrostomy tube needed to be placed by IR. On 4/19/19, renal scan showed high-grade obstruction of the left renal collecting system most likely due to oobstruction at the level of the mid ureter – 79% function on the right and only 21% function on the left. After much discussion with Dr. Bacala, the patient underwent a single-port robotic nephrectomy on 8/2/19. He was discharged on 8/3/19. First single-port robotic nephrectomy in the region.





93 providers

30 Nurses

12 Tech Partners

20 RRT

17 Physicians

14 Therapist (PT, OT, Speech)

118 Blood products

48 PRBCs

6 FFP

29 Platelets

36 Cryoprecipitate



Overarching themes of the US Healthcare System

- Expensive
- Unsafe
- Highly Variable



US Debt Clock.org

State Debt Clocks

World Debt Clocks



Get the iPhone App



Debt Clock Time Machine

US NATIONAL DEBT

\$22,508,981,912,645

DEBT PER CITIZEN
\$68,351

DEBT PER TAXPAYER
\$183,030

US FEDERAL SPENDING **↑154%**

\$4,443,071,268,163

US FEDERAL BUDGET DEFICIT

\$1,027,318,851,591

US FEDERAL BUDGET DEFICIT/SURPLUS TO GDP RATIO

2.093 % **3.899 %** **2.132 %** **9.165 %** **4.832 %**

1980 1990 2000 2010 **NOW**

US FEDERAL TAX REVENUE **↑77%**

\$3,415,752,419,597

REVENUE PER CITIZEN

\$10.374

REVENUE PER TAXPAYER

\$27,789

INCOME TAX REVENUE

\$1,741,304,351,533

PAYROLL TAX REVENUE

\$1,220,345,412,493

CORPORATE TAX REVENUE

\$236,835,749,508

TARIFF TAX REVENUE

\$69,652,175,010

US FEDERAL REVENUE TO GDP RATIO

1900 • **3.170 %** 1950 • **13.70 %** 2000 • **19.34 %** **NOW • 16.07 %**

TOTAL STATE REVENUE

\$1,665,646,983,117

TOTAL LOCAL REVENUE

\$1,409,940,582,602

REVENUE PER CITIZEN

\$9,340

REVENUE PER TAXPAYER

\$13,552

STATE DEBT

\$1,214,460,628,770

LOCAL DEBT

\$1,881,699,396,884

PROPERTY TAX REVENUE

\$591,190,878,358

REVENUE PER EMPLOYEE

\$763,749

UNFUNDED PENSION LIABILITY

\$6,688,178,552,590

MUNICIPAL EMPLOYEES

19,333,080

Largest Budget Items

MEDICARE/MEDICAID

\$1,164,753,625,772

SOCIAL SECURITY

\$1,027,365,944,331

DEFENSE/WAR

\$639,509,662,380

INCOME SECURITY

\$297,163,043,754

NET INTEREST ON DEBT

\$371,161,837,524

FEDERAL PENSIONS

\$285,754,831,254

US GROSS DOMESTIC PRODUCT **↑124%**

\$21,260,331,893,405

TOTAL FEDERAL/STATE/LOCAL SPENDING

\$7,570,762,214,972

GROSS DEBT TO GDP RATIO

105.87 %

REVENUE TO GDP RATIO

30.532 %

SPENDING TO GDP RATIO

35.609 %

US POPULATION

329,301,348

US WORK FORCE **NOW**

157,072,752

OFFICIAL UNEMPLOYED

5,948,053

DOLLAR SUPPLY ADDED 2019

\$653,045,950,534

US INCOME TAXPAYERS

122,930,913

US WORK FORCE 2000*

157,713,784

ACTUAL UNEMPLOYED

11,690,930

DOLLAR SUPPLY ADDED 1913

\$651,338,947

PRIVATE SECTOR JOBS

124,184,430

NOT IN LABOR FORCE **NOW**

96,083,084

FULL-TIME WORKERS

130,223,615

DOLLAR TO CITIZEN RATIO **NOW**

\$1,984 PER CIT.

SELF-EMPLOYED

8,767,823

NOT IN LABOR FORCE 2000*

80,510,513

PART-TIME WORKERS

26,799,372

DOLLAR TO CITIZEN RATIO 1913

\$6.63 PER CIT.

UNION WORKERS

15,204,486

MEDIAN INCOME **NOW**

\$33,169

MEDIAN NEW HOME **NOW**

\$312,833

DOLLAR TO OIL RATIO **NOW**

\$19.34 PER BBL.

GOVERNMENT EMPLOYEES

23,899,288

MEDIAN INCOME 2000 *

\$30,722

MEDIAN NEW HOME 2000

\$165,351

DOLLAR TO OIL RATIO 1913

\$2.06 PER BBL.

MANUFACTURING JOBS **NOW**

12,862,007

BANKRUPTCIES

750,261

PRISON INMATES

2,146,344

DOLLAR TO SILVER RATIO **NOW**

\$724 PER OZ.

MANUFACTURING JOBS 2000 *

17,186,109

FORECLOSURES

411,404

CONVICTED FELONS

20,151,387

DOLLAR TO SILVER RATIO 1913

\$2.64 PER OZ.

US RETIREES

53,514,728

US VETERANS

20,845,616

PUBLIC SCHOOL STUDENTS

50,779,589

DOLLAR TO GOLD RATIO **NOW**

\$5,931 PER OZ.

US DISABLED

10,112,898

US ARMED FORCES

1,368,228

CHARTER SCHOOL STUDENTS

3,410,526

DOLLAR TO GOLD RATIO 1913

\$28.94 PER OZ.

LIVING IN POVERTY

37,547,393

MEDICARE ENROLLEES

59,480,688

FOOD STAMP RECIPIENTS

34,644,736

PAPER TO SILVER RATIO **NOW**

197.18 to 1

WITHOUT INSURANCE

27,436,848

MEDICAID RECIPIENTS

76,568,365

TOTAL RECEIVING BENEFITS

169,842,046

PAPER TO GOLD RATIO **NOW**

107.89 to 1

Money Creation

MONETARY BASE **NOW ↑441%**

\$3,256,906,963,955

M2 MONEY SUPPLY **NOW ↑207%**

\$14,762,243,271,719

TREASURY SECURITIES **NOW ↑397%**

\$1,004,947,634,752

CURRENCY AND CREDIT DERIVATIVES **NOW ↑497%**

\$545,444,854,445,549

MONETARY BASE 2000

\$601,957,370,998

M2 MONEY SUPPLY 2000

\$4,815,266,021,897

TREASURY SECURITIES 2000

\$201,888,763,101

CURRENCY AND CREDIT DERIVATIVES 2000

\$91,374,844,146,394

Trade Numbers

US DEBT HELD BY FOREIGN COUNTRIES

\$6,487,670,159,149

US TRADE DEFICIT

\$886,690,066,079

US TRADE DEFICIT • CHINA

\$402,026,542,522

US IMPORTED OIL

\$215,972,052,178

IMPORTED OIL • OPEC

\$53,132,554,320

SMALL BUSINESS ASSETS

\$13,198,818,457,294

CORPORATION ASSETS

\$26,729,649,329,741

HOUSEHOLD ASSETS

\$114,235,920,521,387

TOTAL NATIONAL ASSETS

\$154,164,388,309,814

ASSETS PER CITIZEN

\$468,135

US FEDERAL BUDGET DEFICIT (GAAP)

\$6,129,589,375,038

SOCIAL SECURITY LIABILITY

\$19,884,635,287,771

MEDICARE LIABILITY

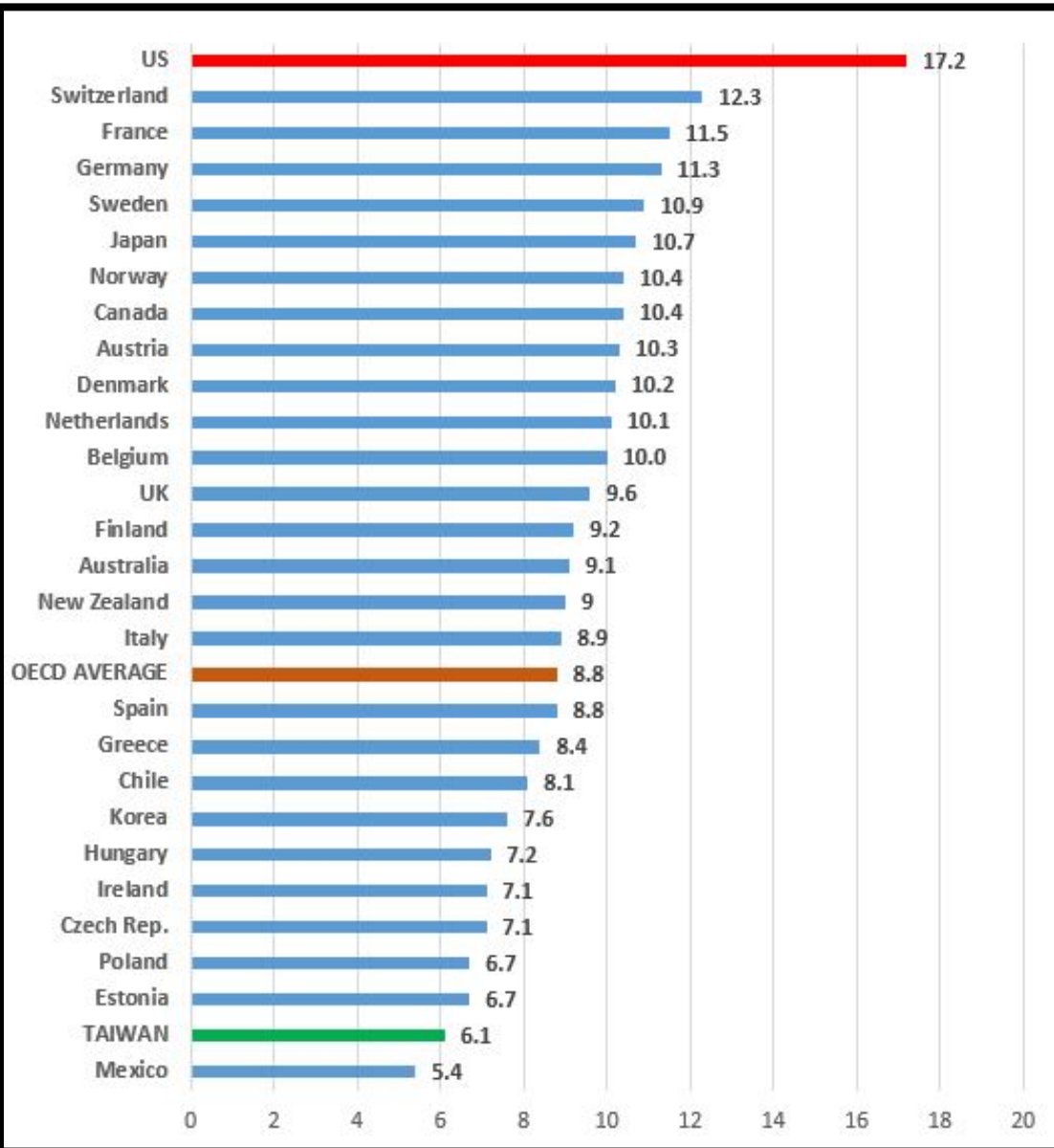
\$30,661,398,587,952

US UNFUNDED LIABILITIES (GAAP)

\$124,912,376,909,555

LIABILITY PER TAXPAYER

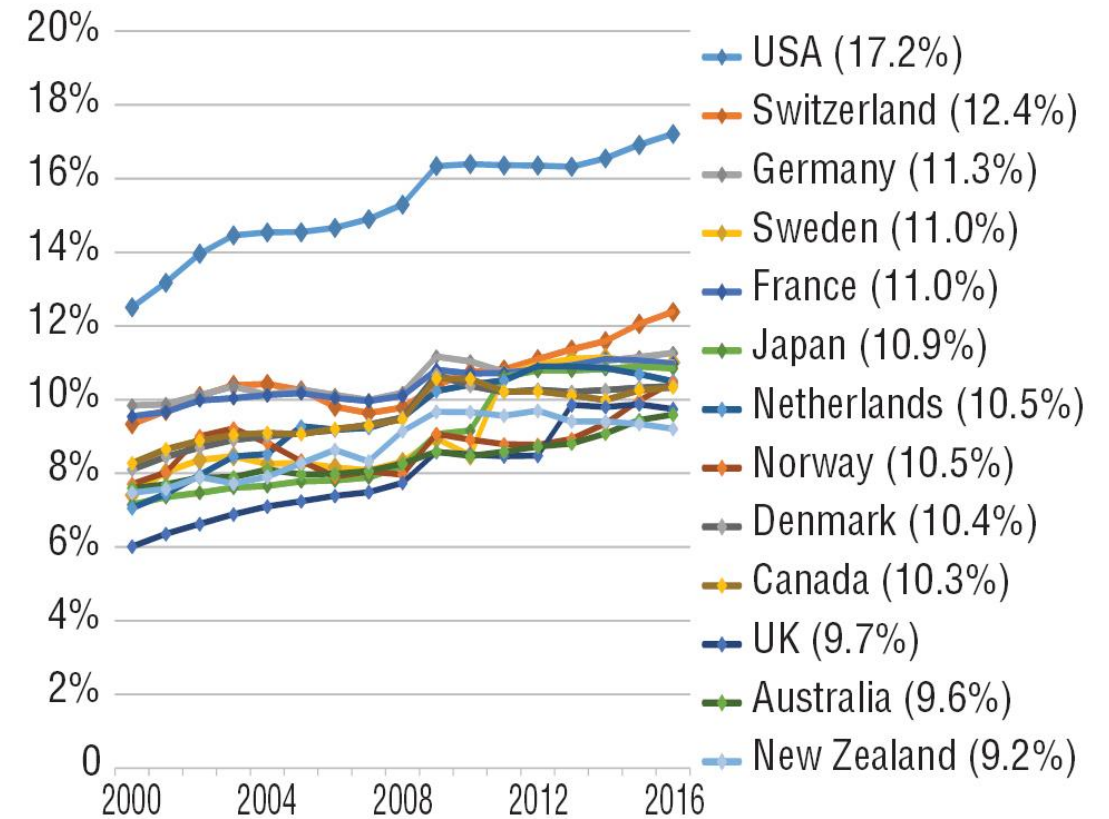
\$1,015,952



Healthcare Spending as a Percentage of GDP, 2000–2016

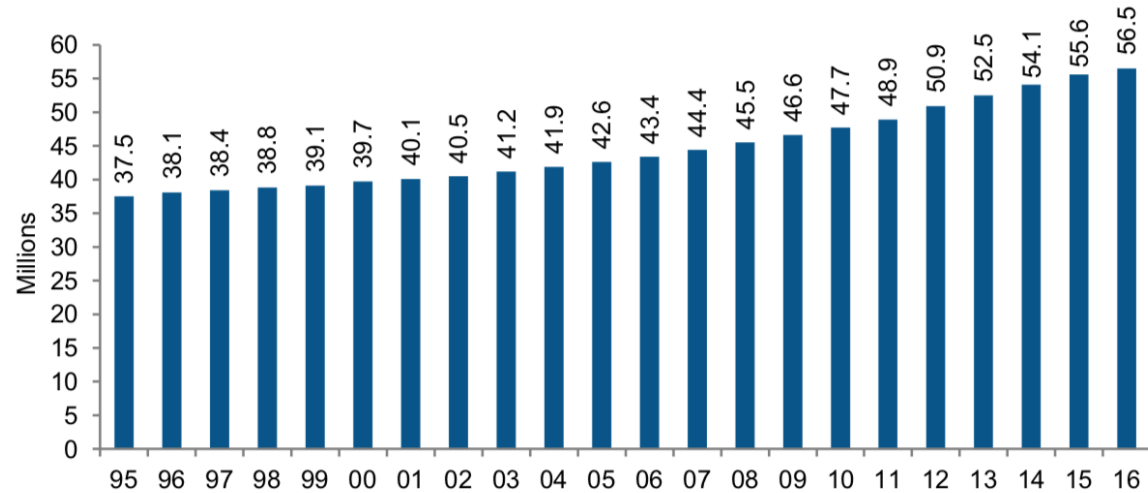
Data Source: OECD

Analysis: Bay Area Council Economic Institute



Data Source: OECD, National Health Expenditure as Percentage of GDP, 2016

Chart 1.15: Medicare Enrollees,⁽¹⁾ 1995 – 2016

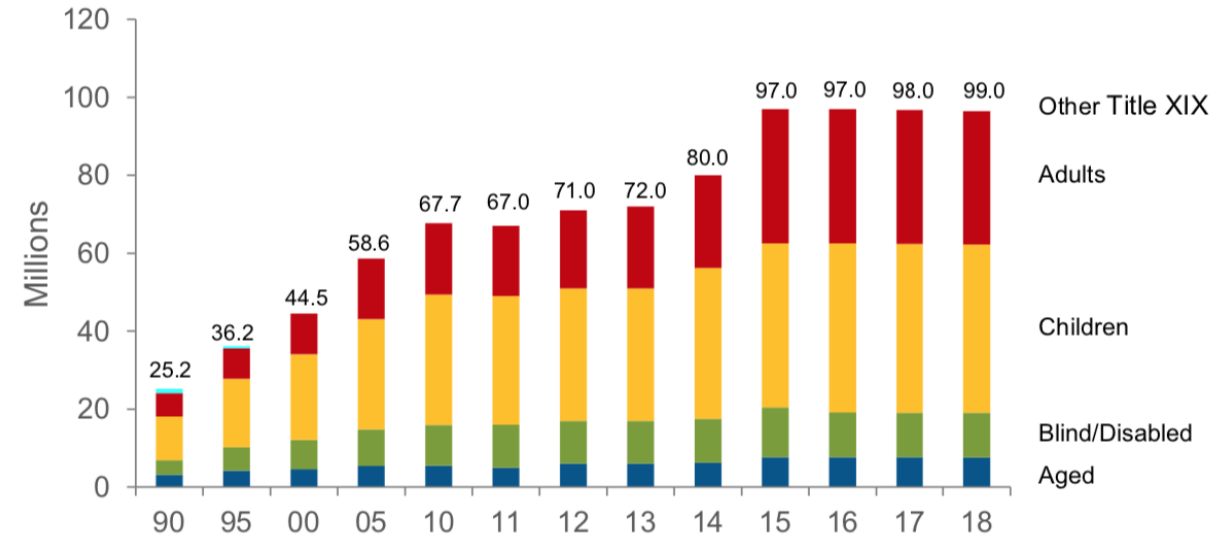


Source: Centers for Medicare & Medicaid Services. Medicare Enrollment: National Trends, 1966 – 2005; Medicare Aged and Disabled Enrollees by Type of Coverage. CMS, Office of the Actuary. Email correspondence with CMS staff (for years 2001 – 2016).

⁽¹⁾ Hospital insurance (Part A) enrollees and/or Supplementary Medical Insurance (Part B) enrollees, including enrollees with Medicare Advantage; includes all persons (aged and disabled).

Medicare/Medicaid Trends

Chart 1.16: Medicaid Enrollees,⁽¹⁾ 1990, 1995, 2000, 2005, 2010 – 2018





Office of the Actuary

Health Spending Growth for 2017

- Increased by 3.9% to \$3.5 trillion
 - a decline from 5.1% in 2014
 - 5.8% in 2015
 - 4.3% in 2016
- Taken together, healthcare spending was 17.9% of GDP
 - Hospital spending, 33% of total, \$1.1 trillion
 - Physician and Clinical Services, 20% of total, \$694 billion
 - Retail Prescription Drug spending, 10%, \$333 billion, 0.4% growth
 - Private Health Insurance spending, \$1.2 trillion
 - Medicare spending was \$705 billion
 - Federal Medicaid spending was \$582 billion

Drivers of US Health Spending

- Prices
- Administrative Burden
- Utilization

Uwe E Reinhardt. Priced Out: The Economic and Ethical Cost of American Health Care



International Federation
of Health Plans

2015 Comparative Price Report

Variation in Medical and Hospital Prices by Country

-- 80 members, 25 countries

-- Prices for US

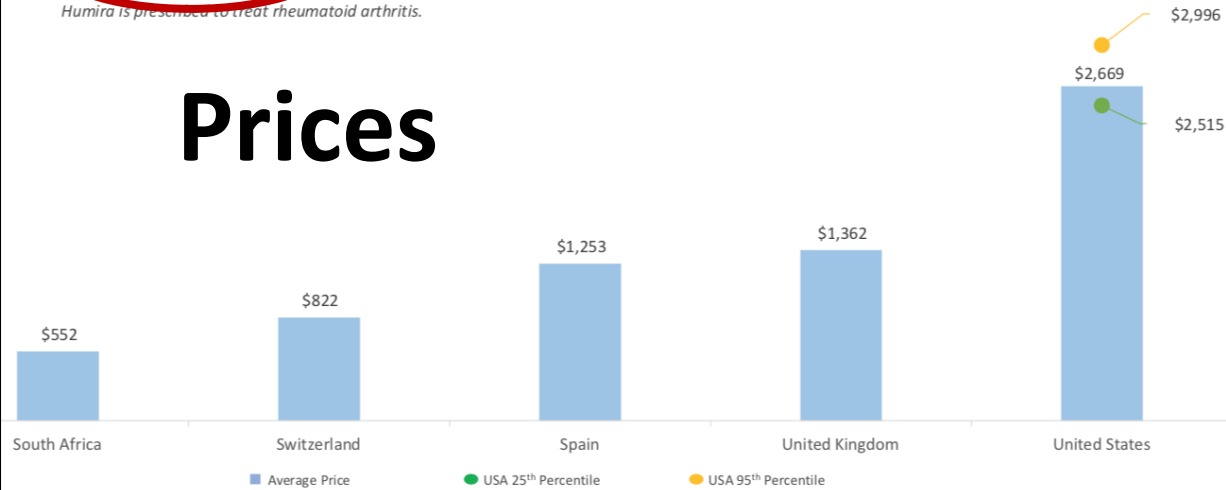
-- 370 million medical claims

-- 170 million pharmacy claims

Drugs: Humira

Humira is prescribed to treat rheumatoid arthritis.

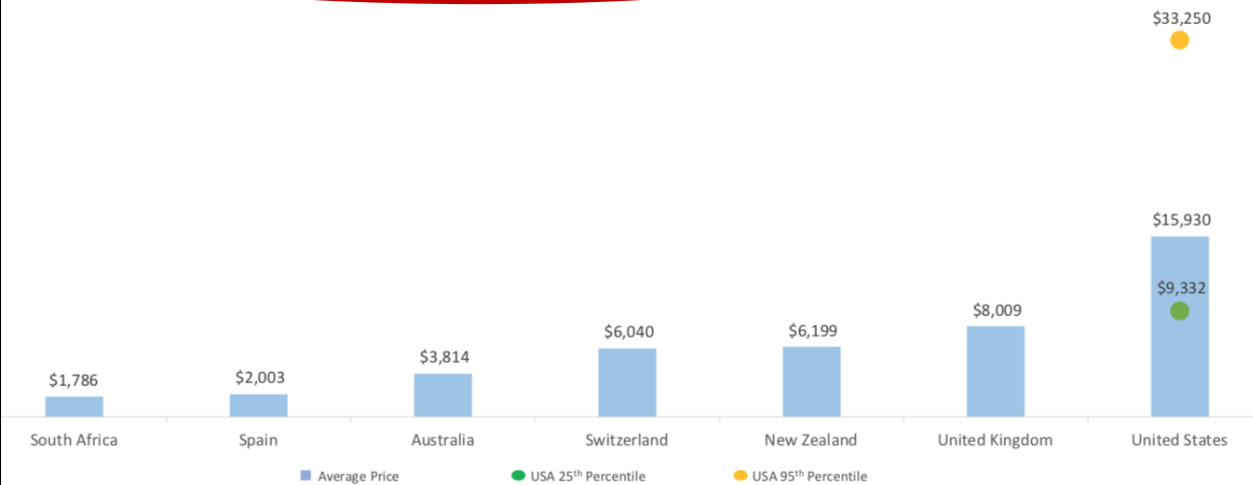
Prices



Total Hospital and Physician: C-Section



Total Hospital and Physician: Appendectomy



Total Hospital and Physician: Bypass Surgery



By Zack Cooper, Stuart Craig, Martin Gaynor, Nir J. Harish, Harlan M. Krumholz, and John Van Reenen

Hospital Prices Grew Substantially Faster Than Physician Prices For Hospital-Based Care In 2007-14

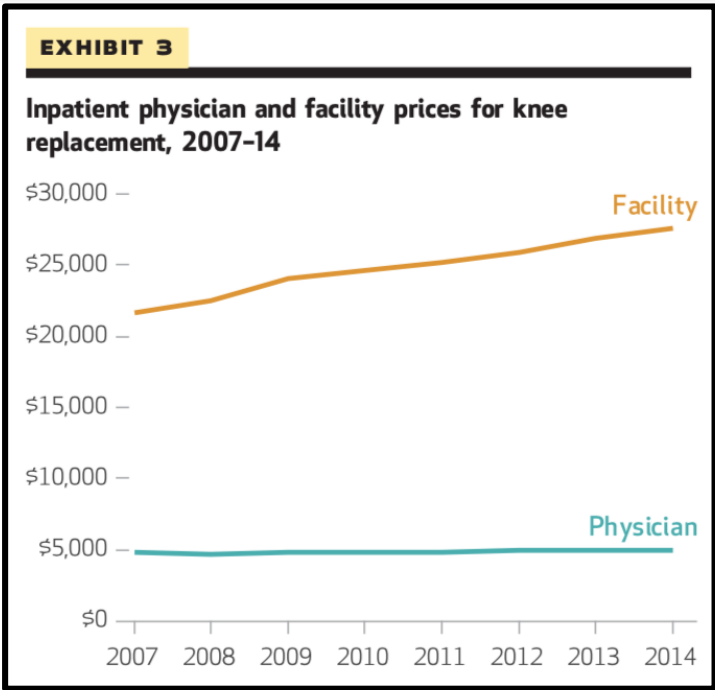
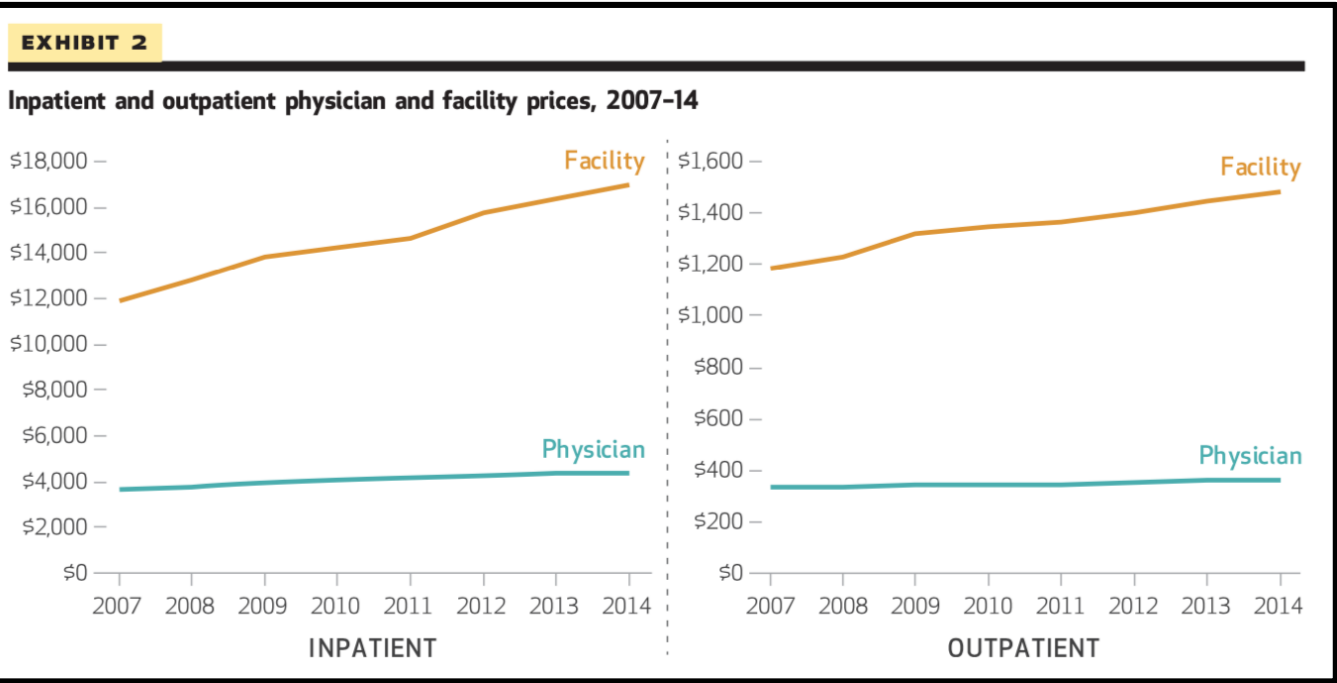
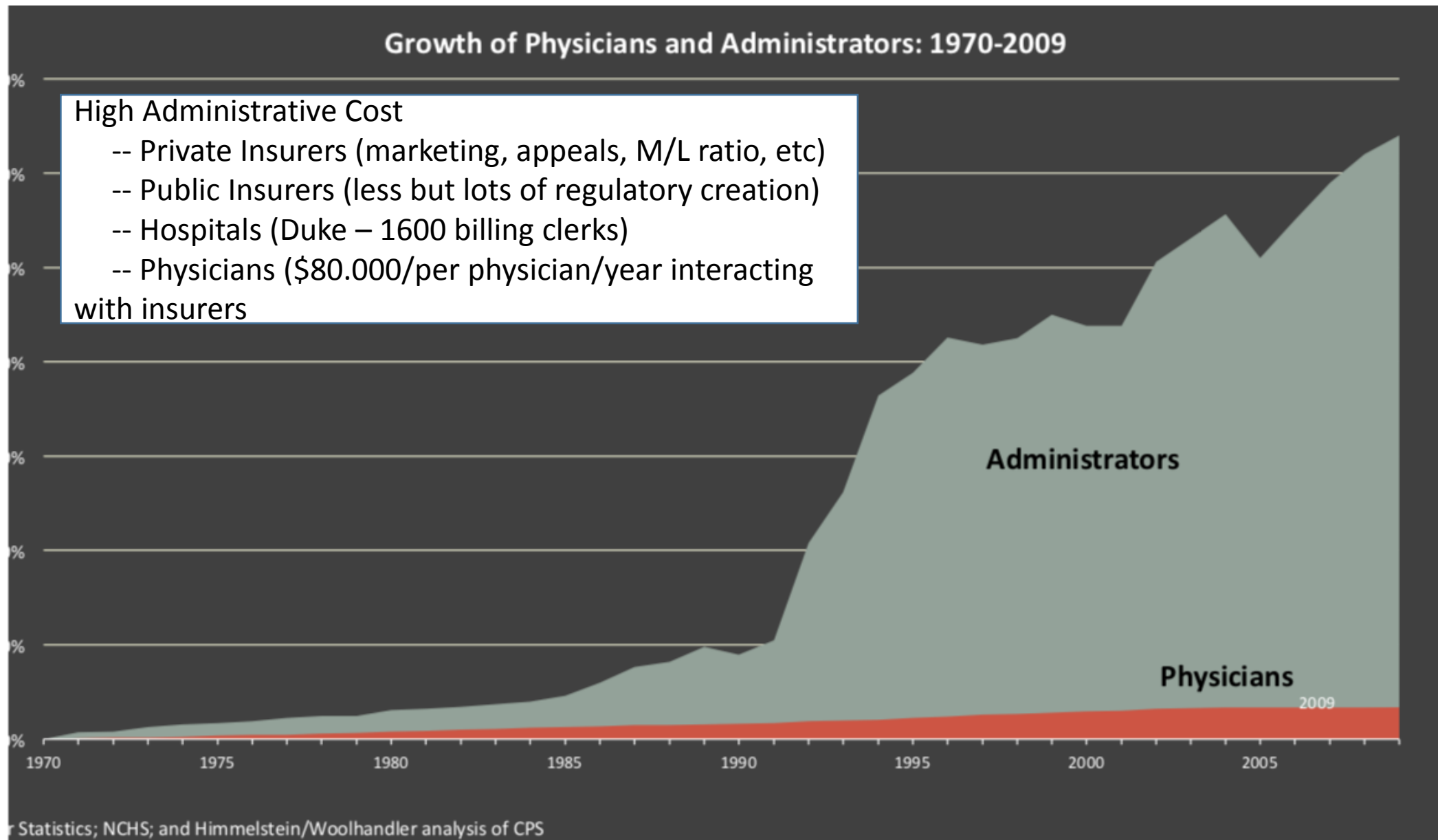


EXHIBIT 4

Changes in physician and facility prices for four hospital-based procedures and for total inpatient and outpatient care, 2007-14

Procedure	Physician price		Facility price		Total price		Facility component of total change
	Change, 2007-14	Compound annualized growth rate	Change, 2007-14	Compound annualized growth rate	Change, 2007-14	Compound annualized growth rate	
Cesarean section	5.9%	0.8%	41.9%	5.1%	27.8%	3.6%	91.7%
Vaginal delivery	7.1	1.0	46.8	5.6	29.4	3.8	89.4
Colonoscopy	34.1	4.3	41.7	5.1	39.6	4.9	76.9
Knee replacement	4.1	0.6	27.4	3.5	23.2	3.0	96.8
Inpatient	17.7	2.4	42.3	5.2	36.5	4.5	88.5
Outpatient	6.1	0.9	25.1	3.2	20.9	2.7	93.5



BEST CARE AT LOWER COST

The Path to Continuously Learning Health Care in America

Committee on the Learning Health Care System in America

Mark Smith, Robert Saunders, Leigh Stuckhardt, and J. Michael McGinnis,
Editors

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

TABLE S-1 Estimated Sources of Excess Costs in Health Care (2009)

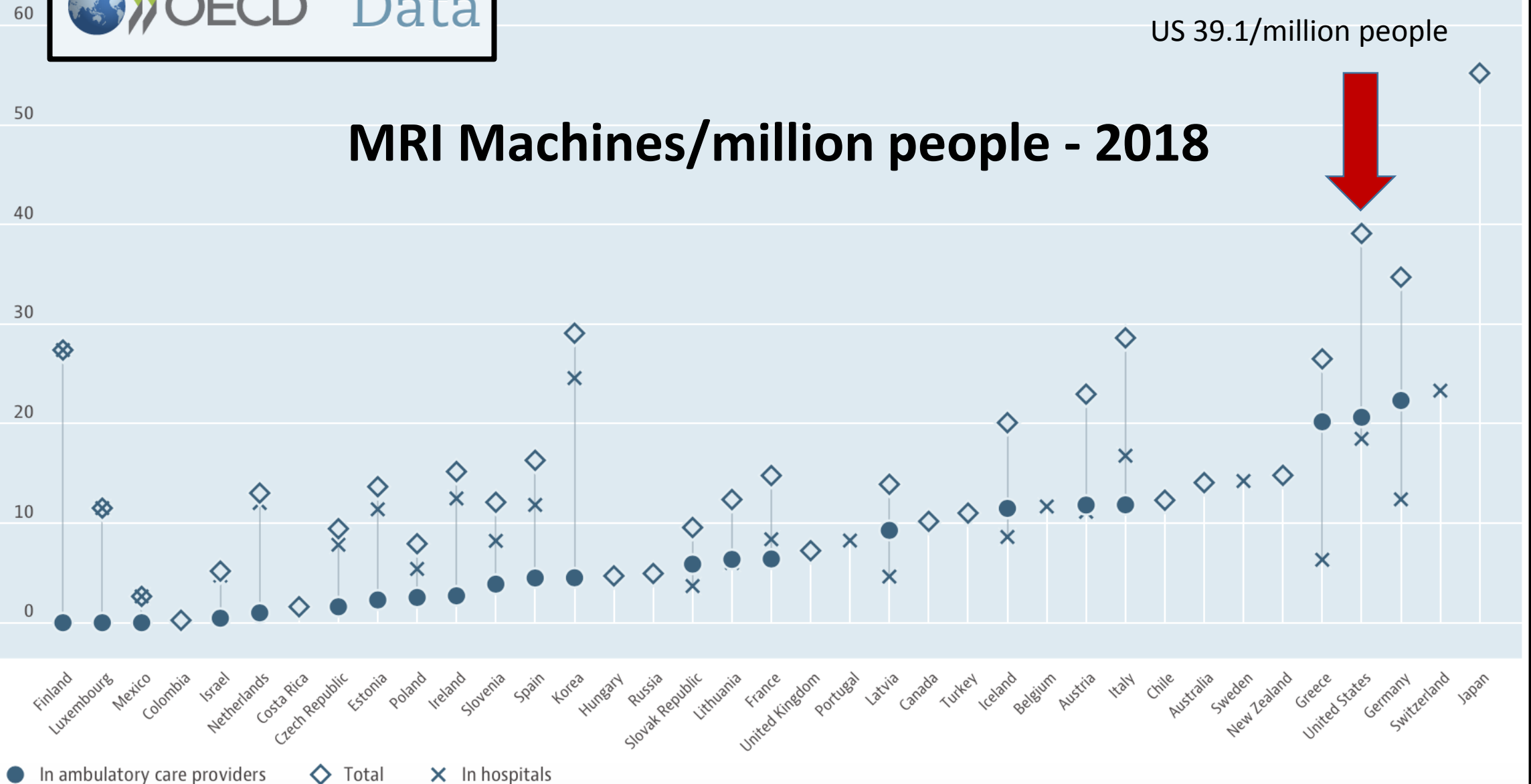
Category	Sources	Estimate of Excess Costs
Unnecessary Services	<ul style="list-style-type: none"> Overuse—beyond evidence-established levels Discretionary use beyond benchmarks Unnecessary choice of higher-cost services 	\$210 billion
Inefficiently Delivered Services	<ul style="list-style-type: none"> Mistakes—errors, preventable complications Care fragmentation Unnecessary use of higher-cost providers Operational inefficiencies at care delivery sites 	\$130 billion
Excess Administrative Costs	<ul style="list-style-type: none"> Insurance paperwork costs beyond benchmarks Insurers' administrative inefficiencies Inefficiencies due to care documentation requirements 	\$190 billion
Prices That Are Too High	<ul style="list-style-type: none"> Service prices beyond competitive benchmarks Product prices beyond competitive benchmarks 	\$105 billion
Missed Prevention Opportunities	<ul style="list-style-type: none"> Primary prevention Secondary prevention Tertiary prevention 	\$55 billion
Fraud	<ul style="list-style-type: none"> All sources—payers, clinicians, patients 	\$75 billion

SOURCE: Adapted with permission from IOM, 2010.

\$765 billion of the \$2.5 trillion spent on healthcare in 2009 was wasteful

MRI Machines/million people - 2018

US 39.1/million people



USA 59.7/million

Mammography Machines/million people - 2018

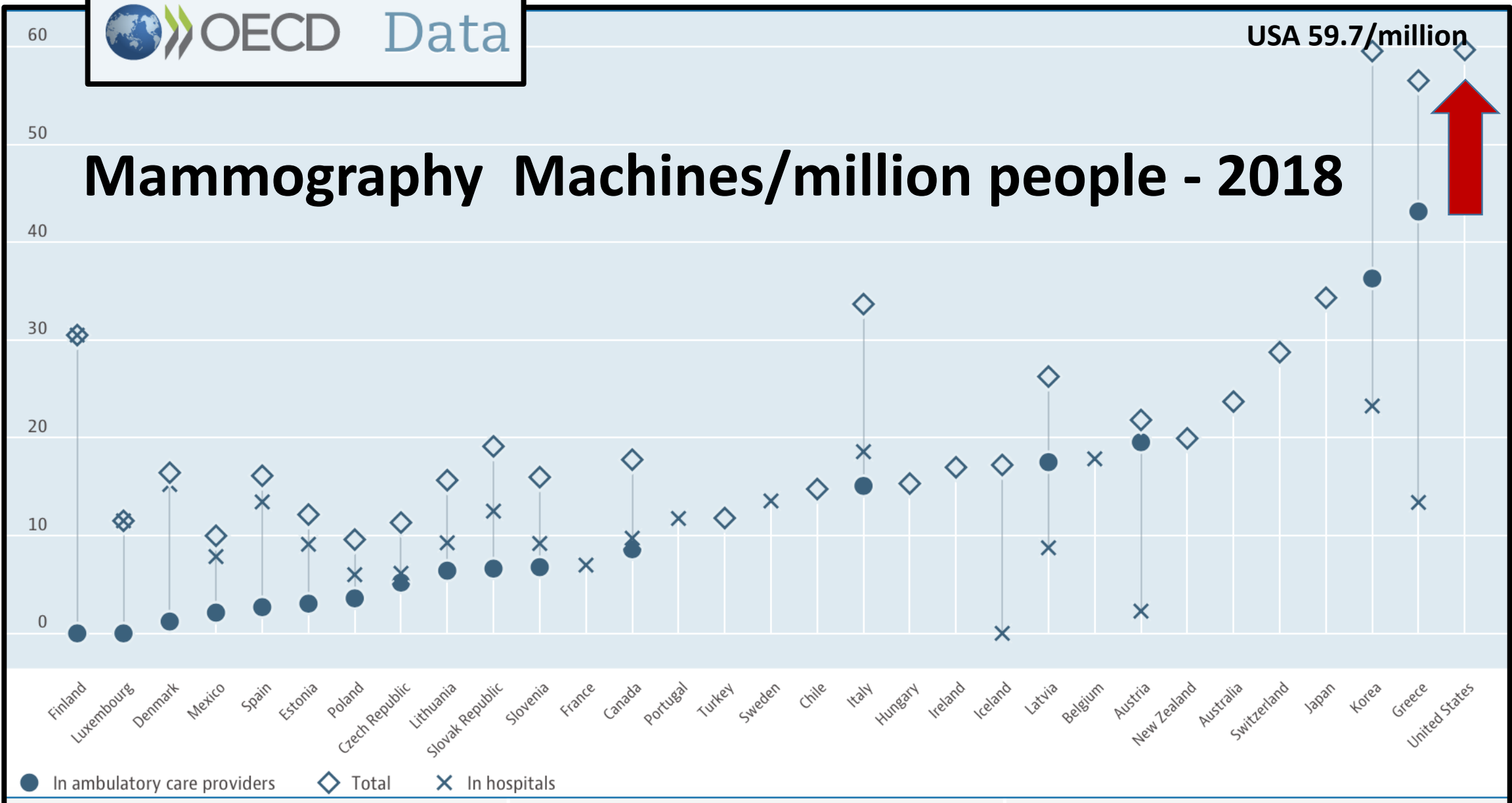
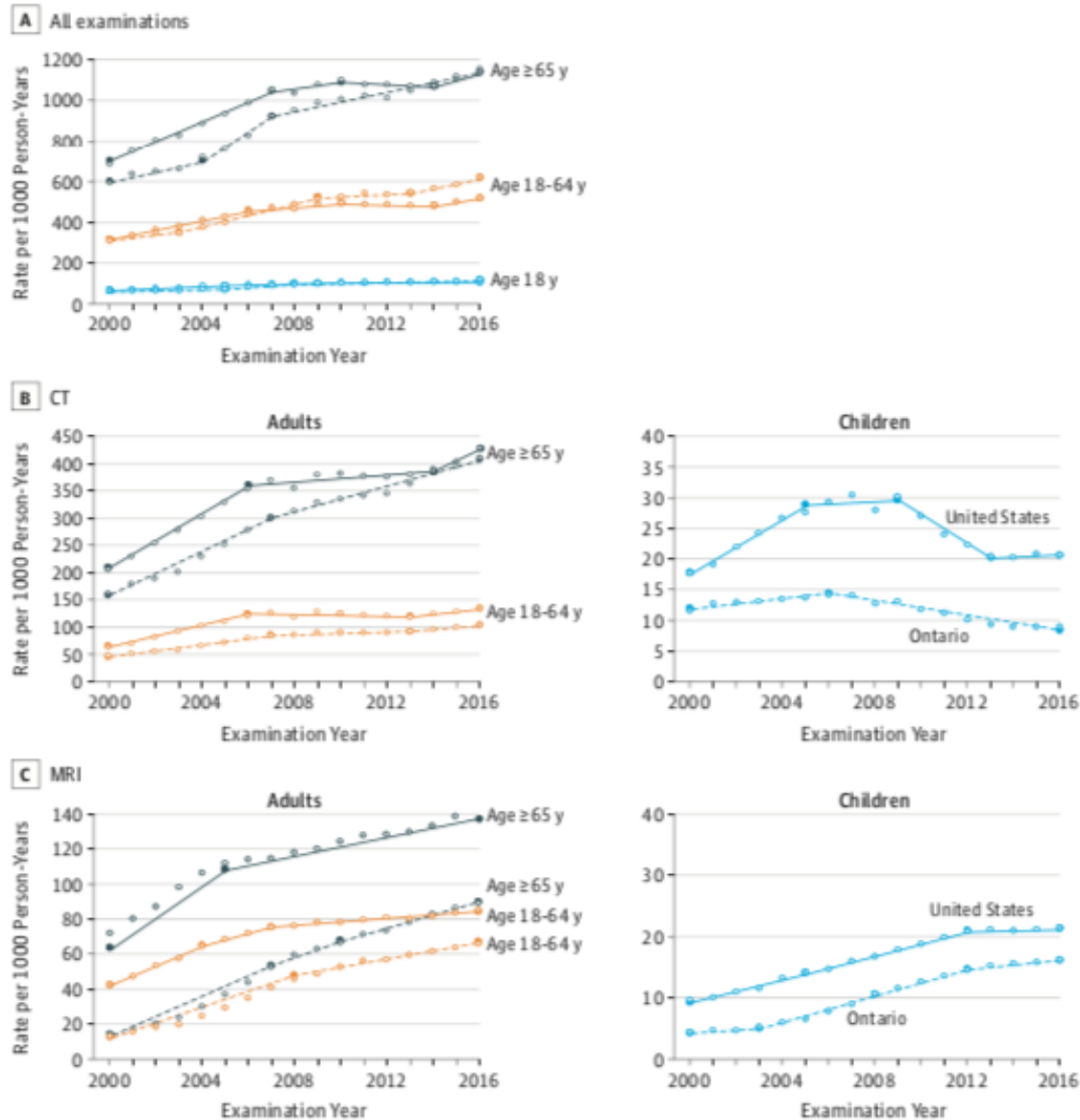
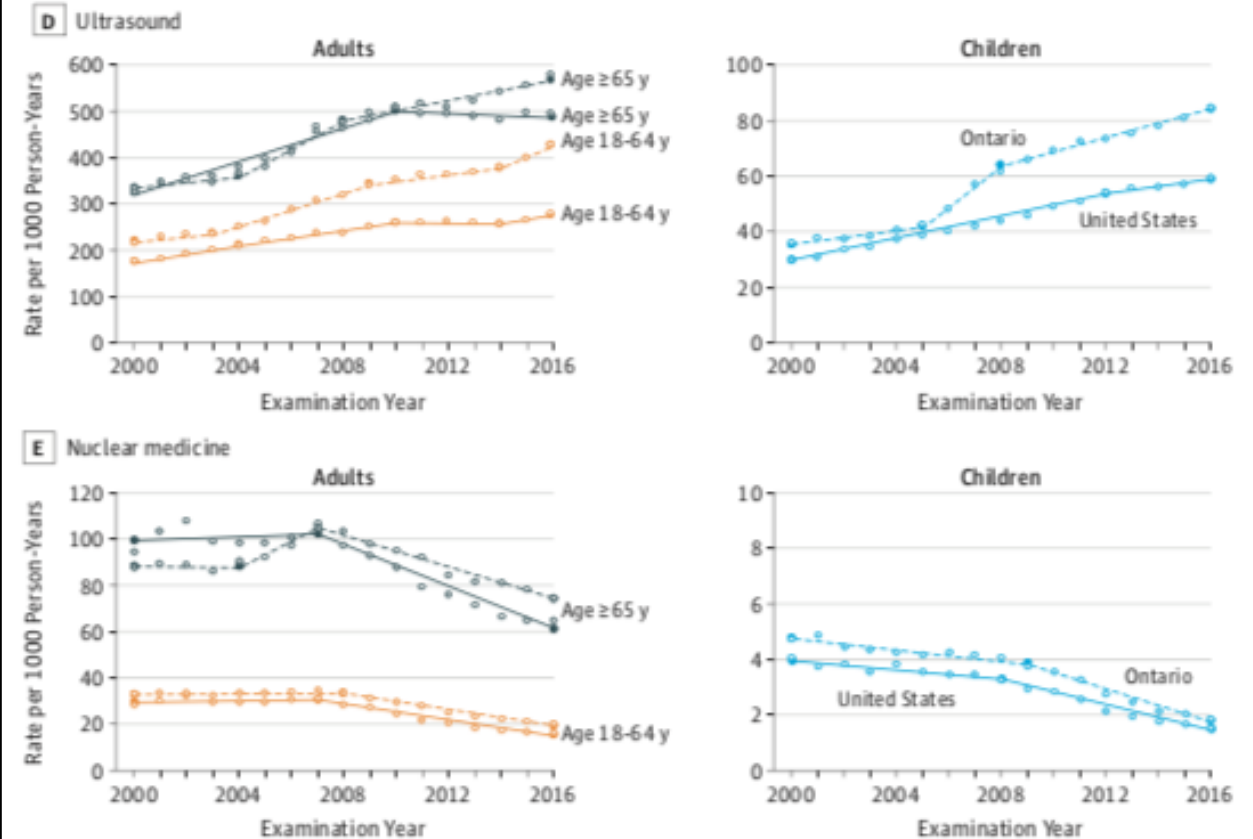


Figure 1. Annual Change in Imaging Rates per 1000 Person-Years by Imaging Modality, Age, and Country, Based on Joinpoint Analysis



JAMA | Original Investigation

Trends in Use of Medical Imaging in US Health Care Systems and in Ontario, Canada, 2000-2016





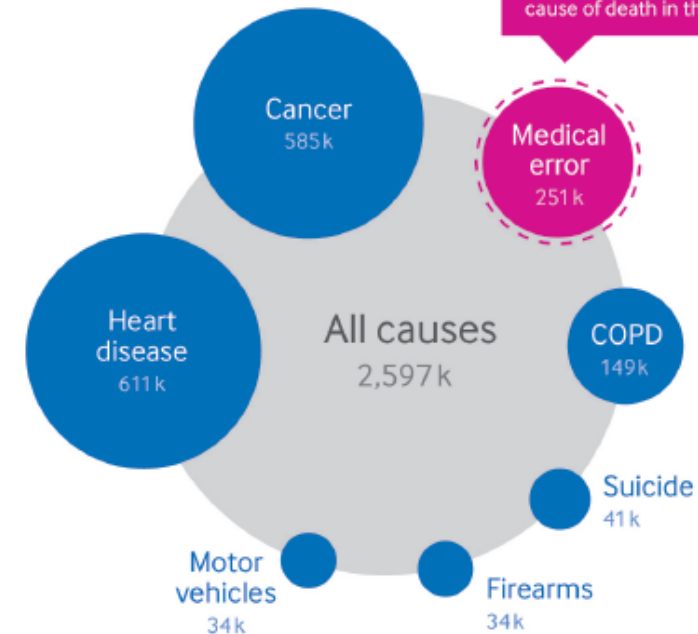
Medical error—the third leading cause of death in the US

Medical error is not included on death certificates or in rankings of cause of death. **Martin Makary** and **Michael Daniel** assess its contribution to mortality and call for better reporting

Martin A Makary *professor*, Michael Daniel *research fellow*

Department of Surgery, Johns Hopkins University School of Medicine, Baltimore, MD 21287, USA

Causes of death, US, 2013



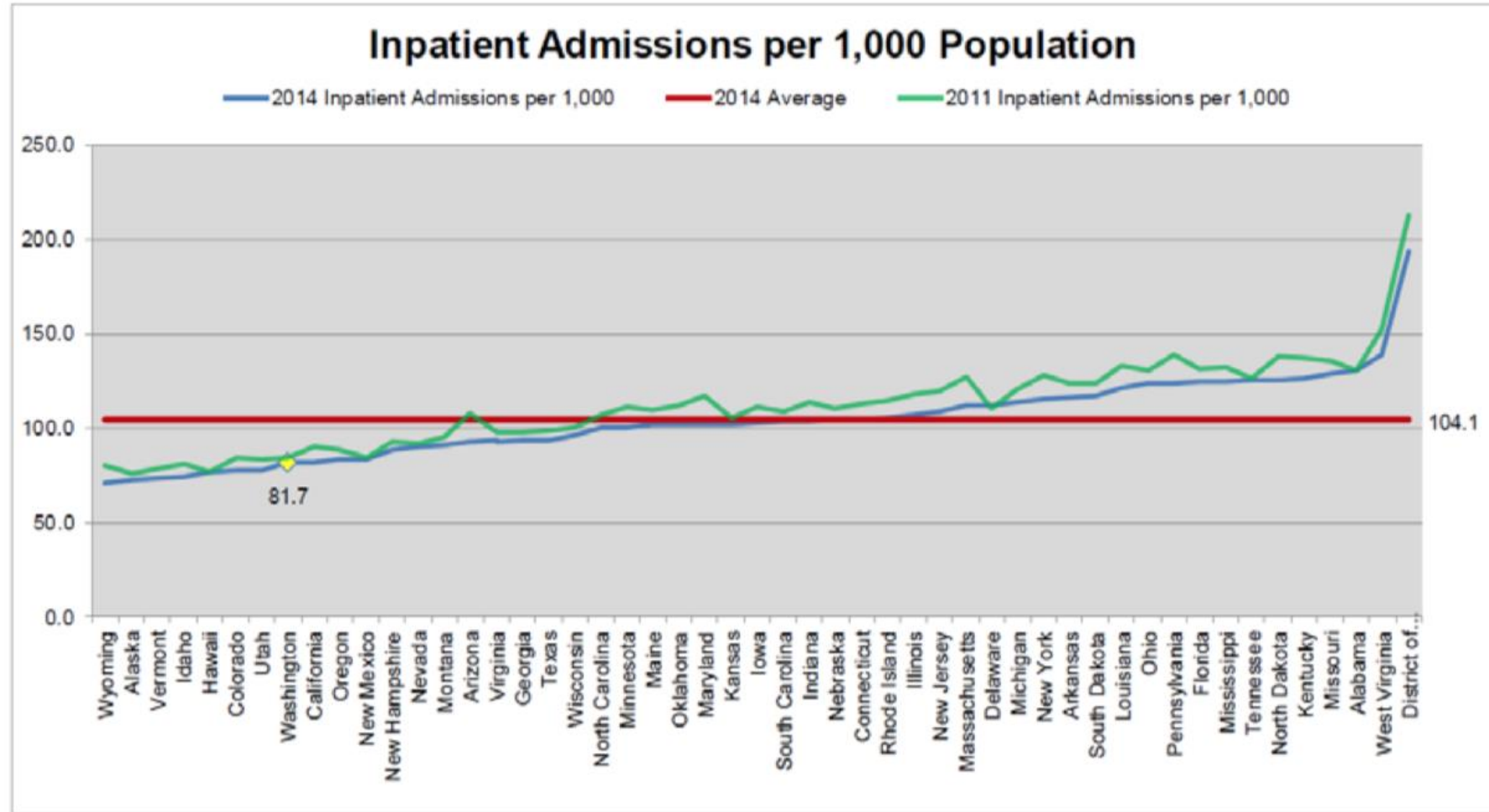
However, we're not even counting this - medical error is not recorded on US death certificates

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Data source:
http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf

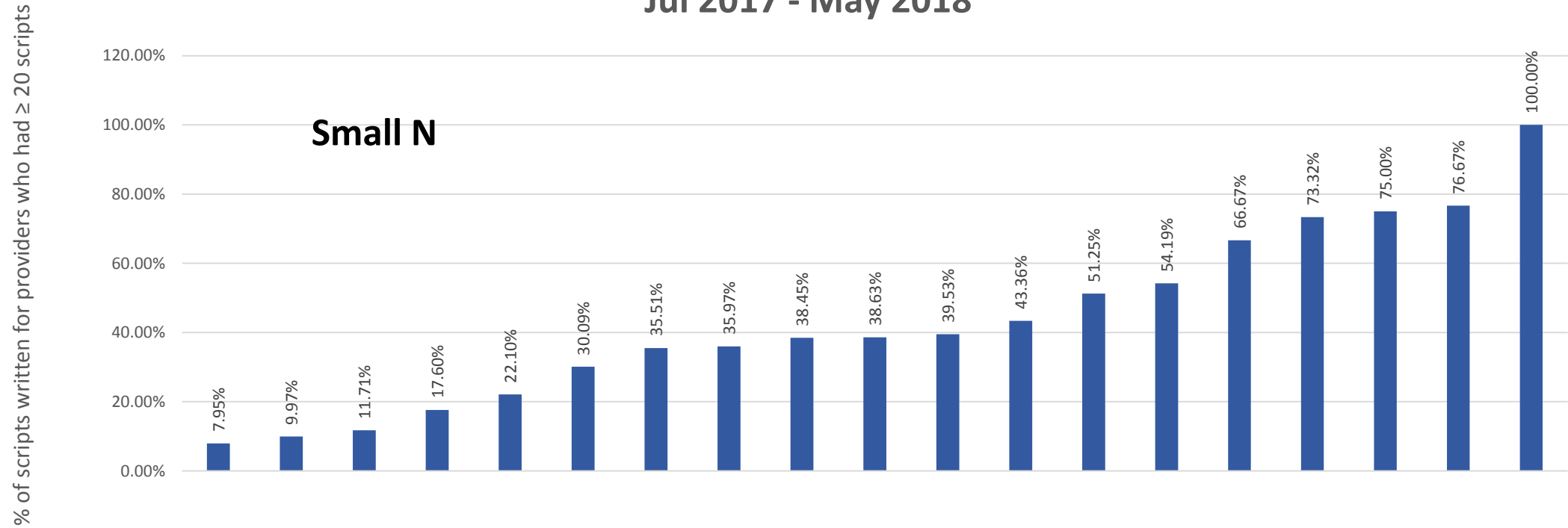
Admissions/1,000 people/State

Graph 1. Inpatient Admissions per 1,000 Population by State



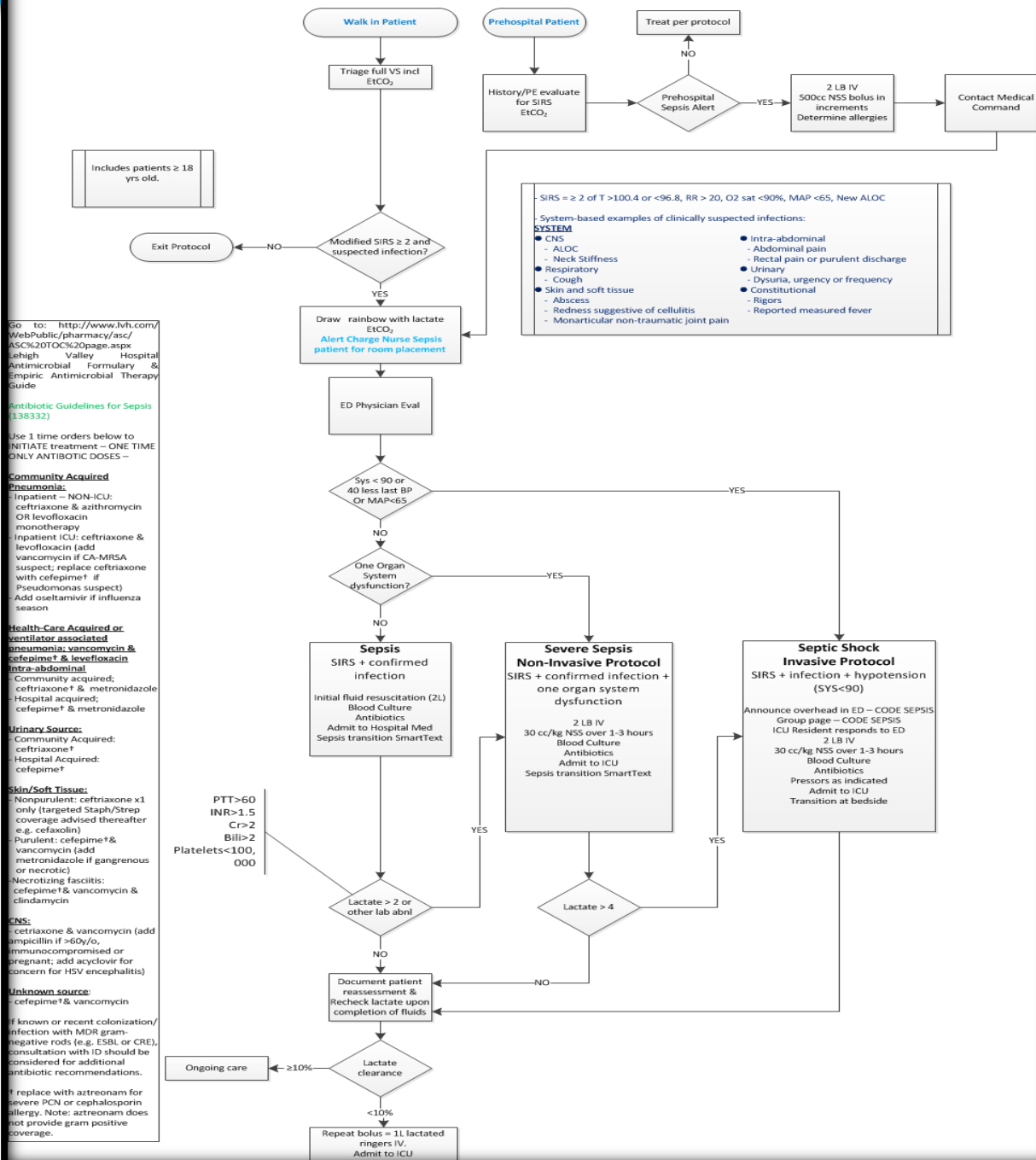
Source: AHA Annual Survey of Hospitals. Population is from the Bureau of the Census.

LVPG MHL IM
Antibiotic Stewardship Report
(antibiotic prescriptions written when indications were not appropriate)
Jul 2017 - May 2018





LVHN SEPSIS RESUSCITATION PATHWAY



Analytics Portal – Care Pathways

Analytics Portal > Care Pathways



CARE PATHWAYS

CARE PATHWAYS TOPICS

SURGERY

Bariatric
CABG
Hip Replacements
Knee Replacements
Hip Fractures
Ileostomy
ERAS
Pressure Ulcer
Spine
Pediatric Trauma Imaging
Transplant Donor
Perioperative Anitcoagulant
ICOUGH
Small Bowel Obstruction

WOMEN'S HEALTH

OB - Active Pregnancy Episodes
OB - Inpatient - Deliveries & Births
OB - Pre-Term Labor
Pregnancy of Unknown Origin
Perinatal Substance Abuse

ADULT INPATIENT MEDICINE

PCI
Pneumonia
CHF
ACS
COPD
Opioid Inpatient
Stroke
Clostridium Difficile
Ventilator
Enhanced Respiratory Monitoring
GI Hemorrhage
Cellulitis
Blood Utilization Management

ADULT AMBULATORY MEDICINE

Diabetes
CHF Ambulatory
Chronic Kidney Disease

PEDIATRICS

Pediatric Sepsis
Hyperbilirubinemia
Pediatric Bronchiolitis
Pediatric Asthma
Childhood Obesity
Pediatric Appendicitis
Pediatric Diabetes Sick Day

BEHAVIORAL HEALTH

Depression Screening

RADIOLOGY

Breast Cancer Screening
Lung Cancer Screening

EMERGENCY MEDICINE

Atrial Fibrillation
End Stage Renal Dialysis - Missed Dialysis Workflow

Pneumonia Clinical Pathway

Owner: Shadi Jarjous

Includes all patients with an MS-DRG of 177, 178, 193, 194, 195, 870, 871, or 872, a primary diagnosis listed on the glossary page, and a discharge date after 1/1/2017. Data is refreshed weekly.

Data by Enterprise Analytics

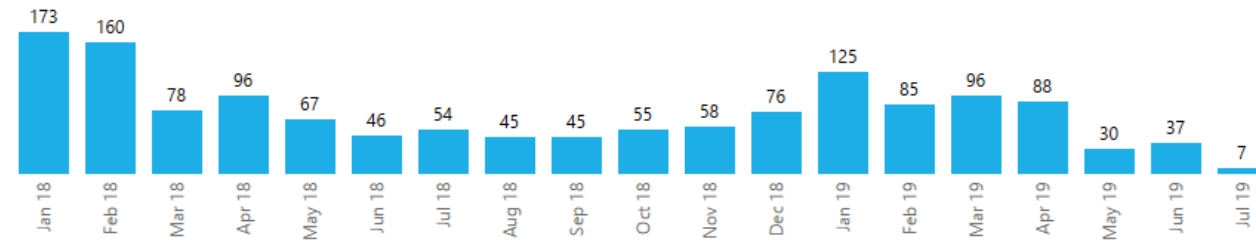
Updated on July 12, 2019

Fiscal Year

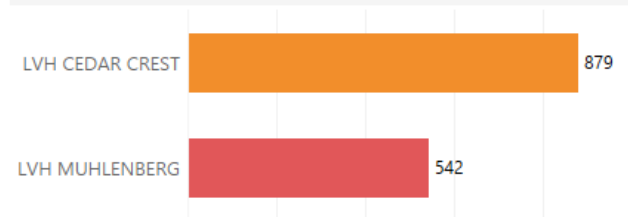
All

Encounter Count by Month

Month is attributed to the discharge date.



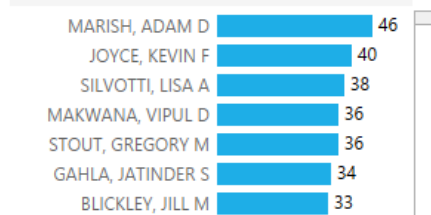
Encounter Location



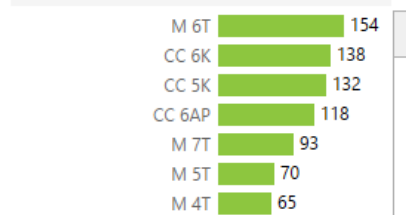
DRG Code



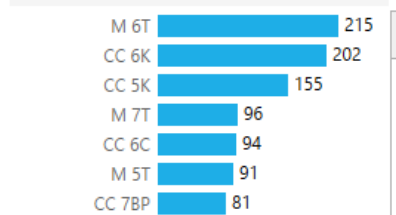
Discharge Provider



Admission Department



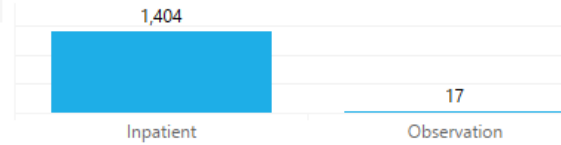
Discharge Department



Total Encounters

1,421

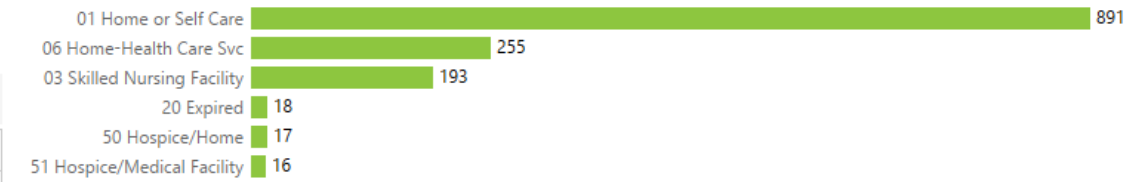
Patient Class



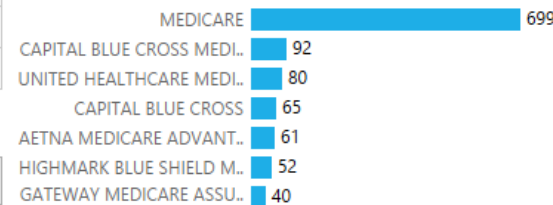
Admission Source



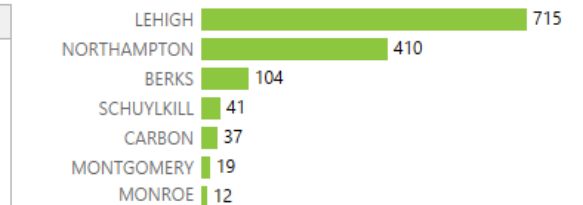
Discharge Disposition



Payor Mix

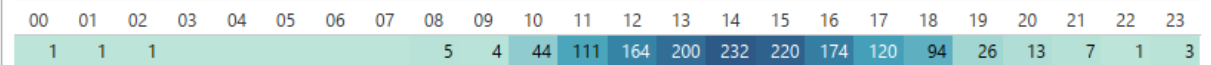


Patient County



Discharge Hour

A count of discharges by hour of the day.



1,188

Members with Episodes

\$47,104,212

Total Claims based Cost

\$3,478

PMPM

2,729

Admissions

1,180

Readmissions

3,622

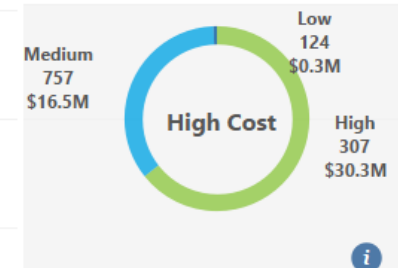
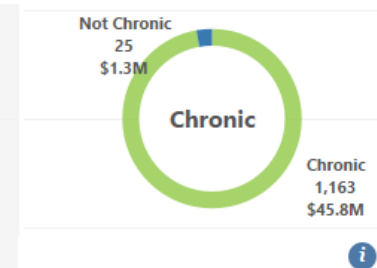
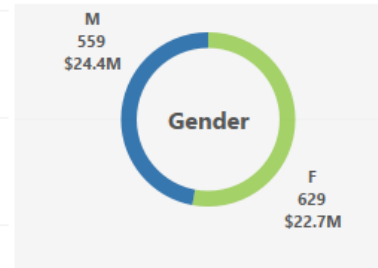
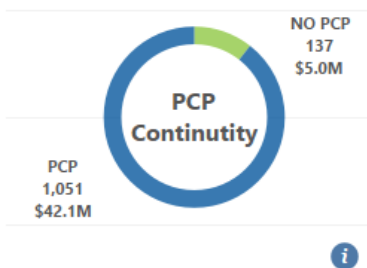
ER Visits

Cost & Utilization	Dollars	
Pulmonology		\$12,979,955
Cardiology	\$8,576,181	
Neurology	\$4,017,151	
Nephrology	\$3,799,395	
Orthopedics & rheumatol..	\$3,491,454	
Gastroenterology	\$2,527,030	
Hematology	\$2,466,207	
Endocrinology	\$1,803,002	
Urology	\$1,326,734	
Dermatology	\$1,214,323	
Psychiatry	\$944,578	
Infectious diseases	\$642,784	
Hepatology	\$588,716	
Ophthalmology	\$563,941	
Gynecology	\$530,741	
Otolaryngology	\$395,053	
Late effects, environment..	\$314,151	
Preventive & administrati..	\$254,462	
Isolated signs & symptoms	\$34,529	
Chemical dependency	\$20,072	
Obstetrics	\$14,885	
Neonatology	\$1,251	

Age Band	
18 - 24	\$68,600
25 - 40	\$634,265
41 - 50	\$1,729,795
51 - 65	\$8,283,034
65 - 80	\$19,427,916
80+	\$16,960,601

IP Admissions	
6 or More	\$13,775,385
3-5 Admits	\$16,585,816
1-2 Admits	\$14,664,409
No Admits	\$2,078,602

Other Demographics (Members & Dollars)



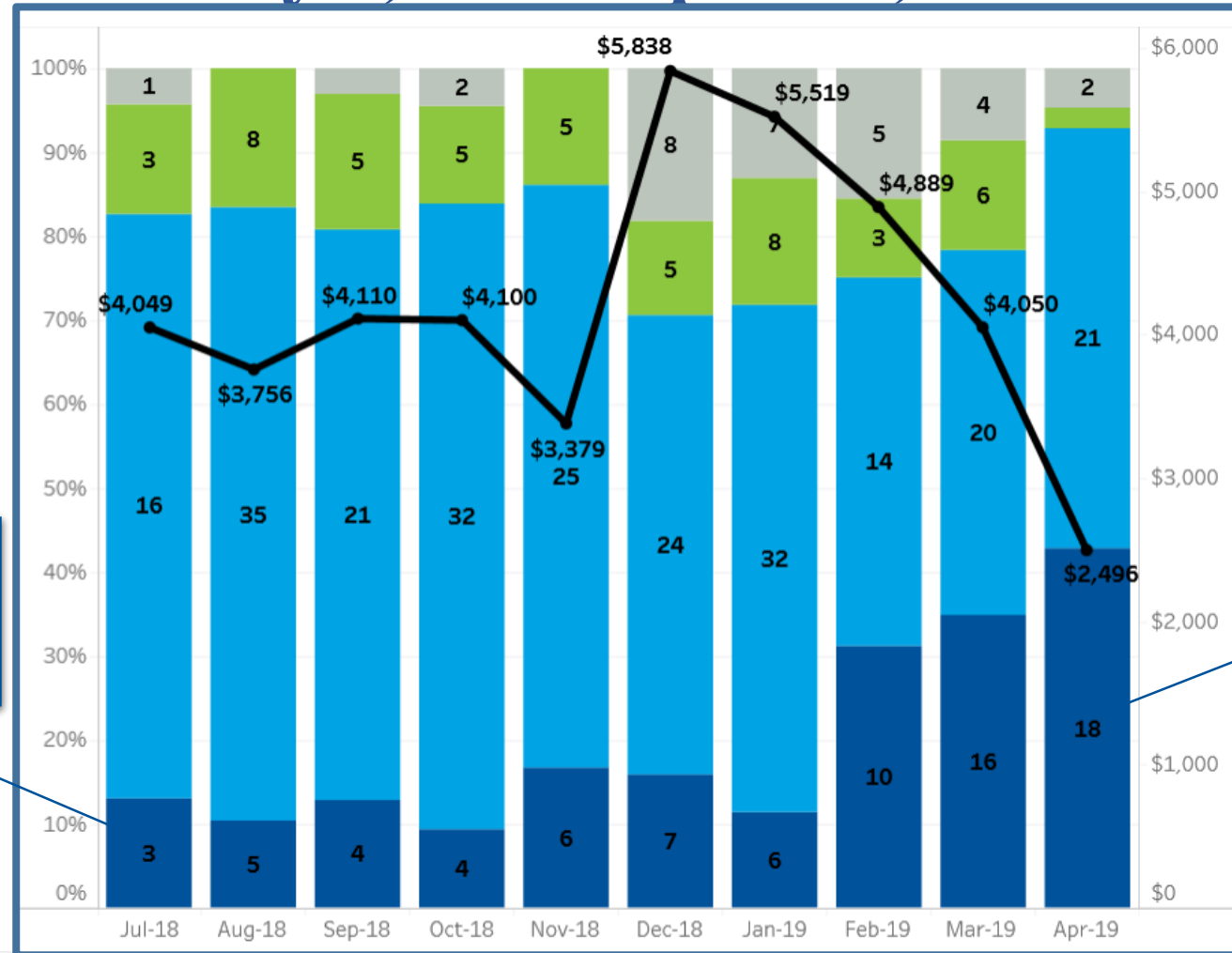
Risk	
N/A	\$596,729
Stable	\$21,763
Moderate	\$160,144
High	\$2,160,180
Very High	\$44,165,395

ER Visits	
6 or More	\$15,077,702
3-5 Visits	\$18,070,075
1-2 Visits	\$12,036,322
No Visits	\$1,920,112

ACSC Admissions (Admits & Dollars)	
Bacterial Pneumonia	481 (\$3,617K)
Heart Failure	219 (\$2,059K)
COPD or Asthma in Older Adults	124 (\$1,264K)
Urinary Tract Infection	36 (\$283K)
Dehydration	26 (\$187K)
Diabetes Long-Term Complications	20 (\$212K)
Hypertension	18 (\$165K)
Uncontrolled Diabetes	8 (\$75K)
Diabetes Short-Term Complications	3 (\$52K)

Dr. A's TKA Discharge Disposition and Cost

July 1, 2018-April 30, 2019



13% of patients
dc'd home

43% of patients
dc'd home

Discharge Disposition

62 Rehab Facility

03 Skilled Nursing Facility

06 Home-Health Care Svc

01 Home or Self Care

Inpatient Opioid Pathway Dashboard -Addiction Recovery Specialist Data

Owner: Paige Roth

Data comes from patients seen and evaluated by the LVHN Addiction Recovery Specialist

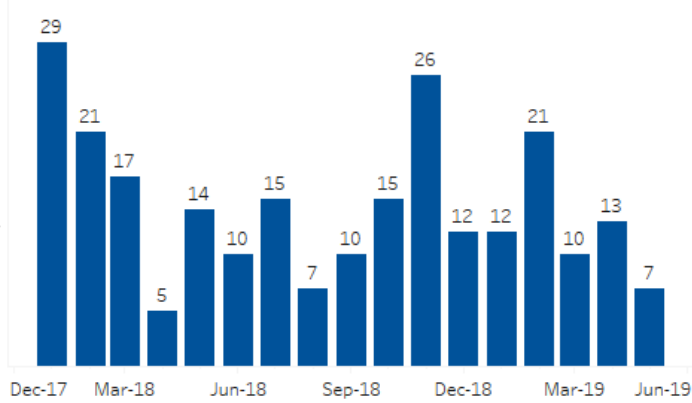
Hospital Location

Lehigh Valley Hospital - C...	183
Lehigh Valley Hospital - M...	57
Lehigh Valley Hospital - 1...	4
Lehigh Valley Hospital - Sc...	0

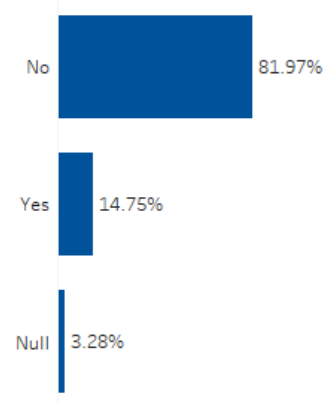
Hospital Unit

Medical Floor	159
ED	61
ICU/TNICU	11
Mother Baby Unit	11
Other	2

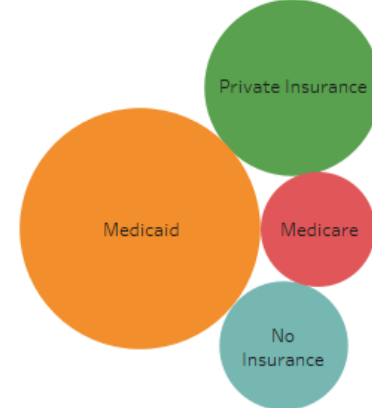
Encounter Count



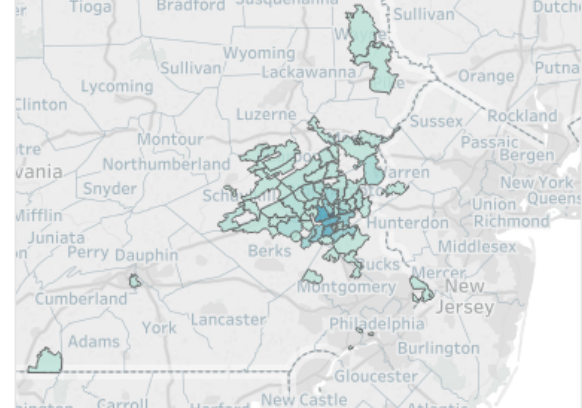
Overdose



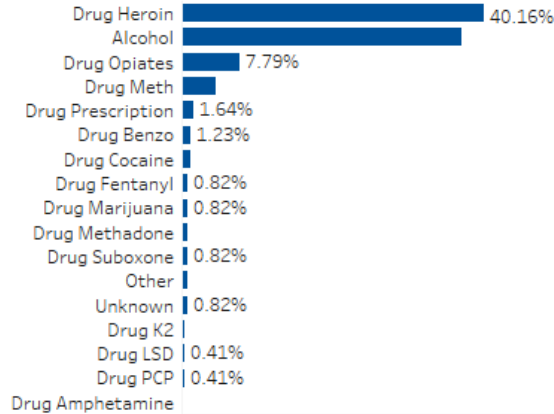
Payor Type



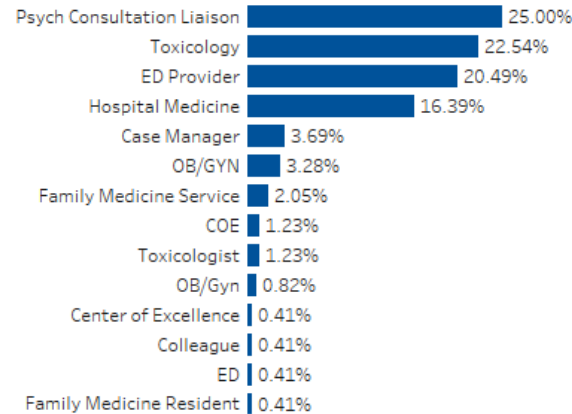
Patient Zip Code



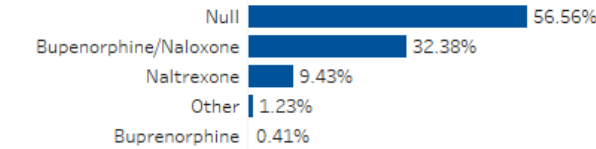
Primary Drug of Choice



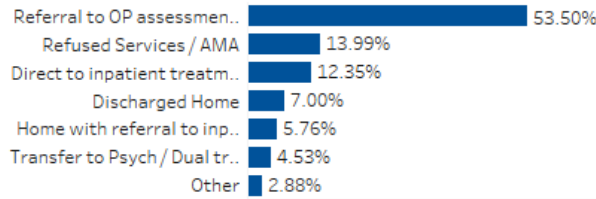
Referral Source



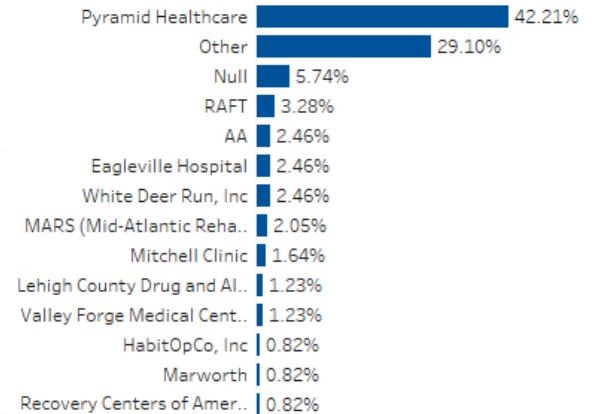
MAT Type



ARS Disposition

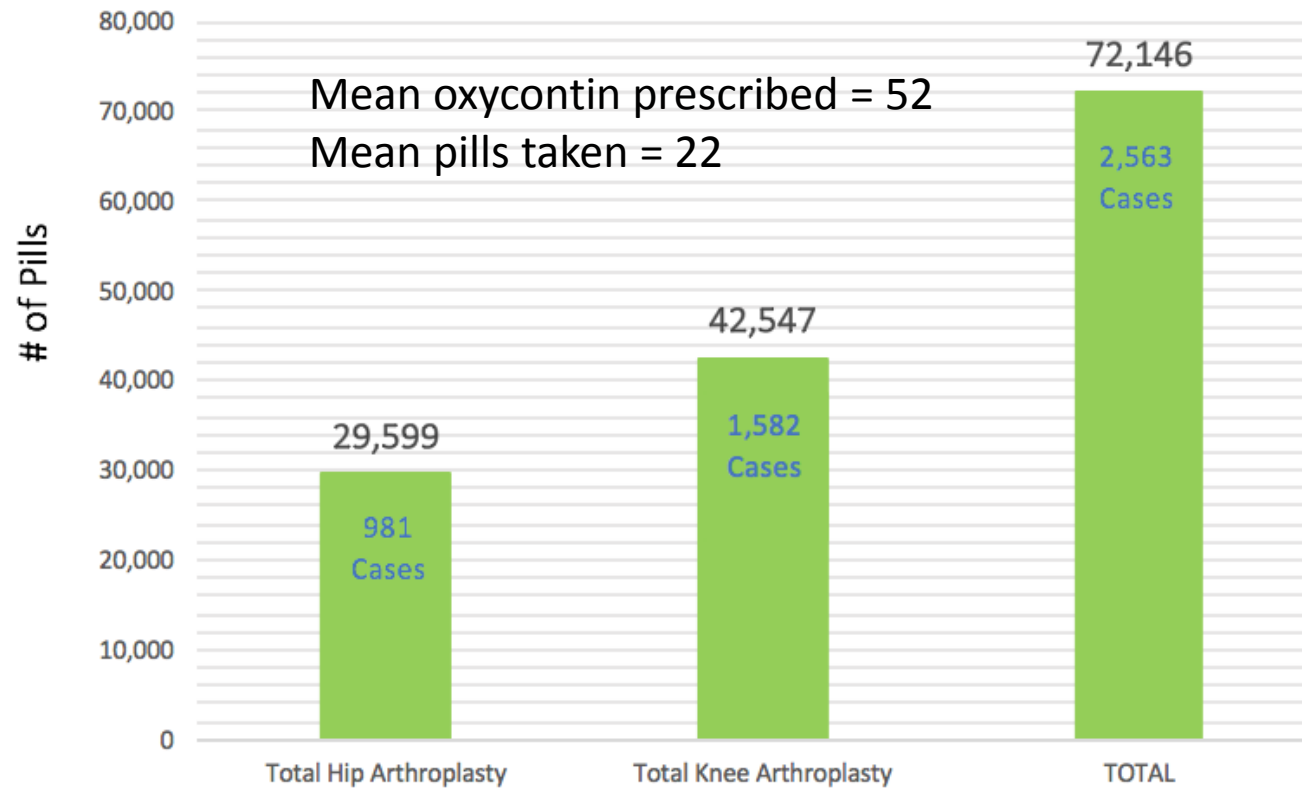


Referred to



Unused Opioids after Joint Replacement

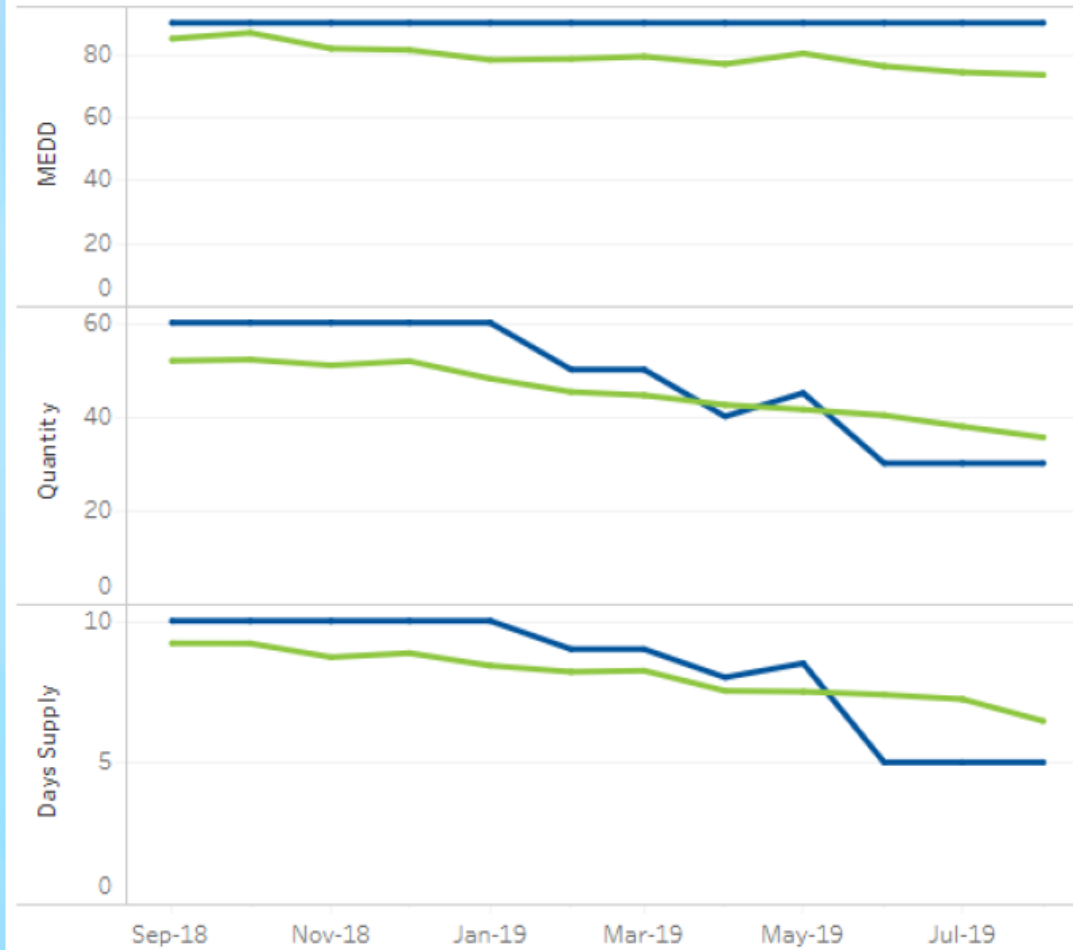
Estimated # of Pills Remaining for FY19



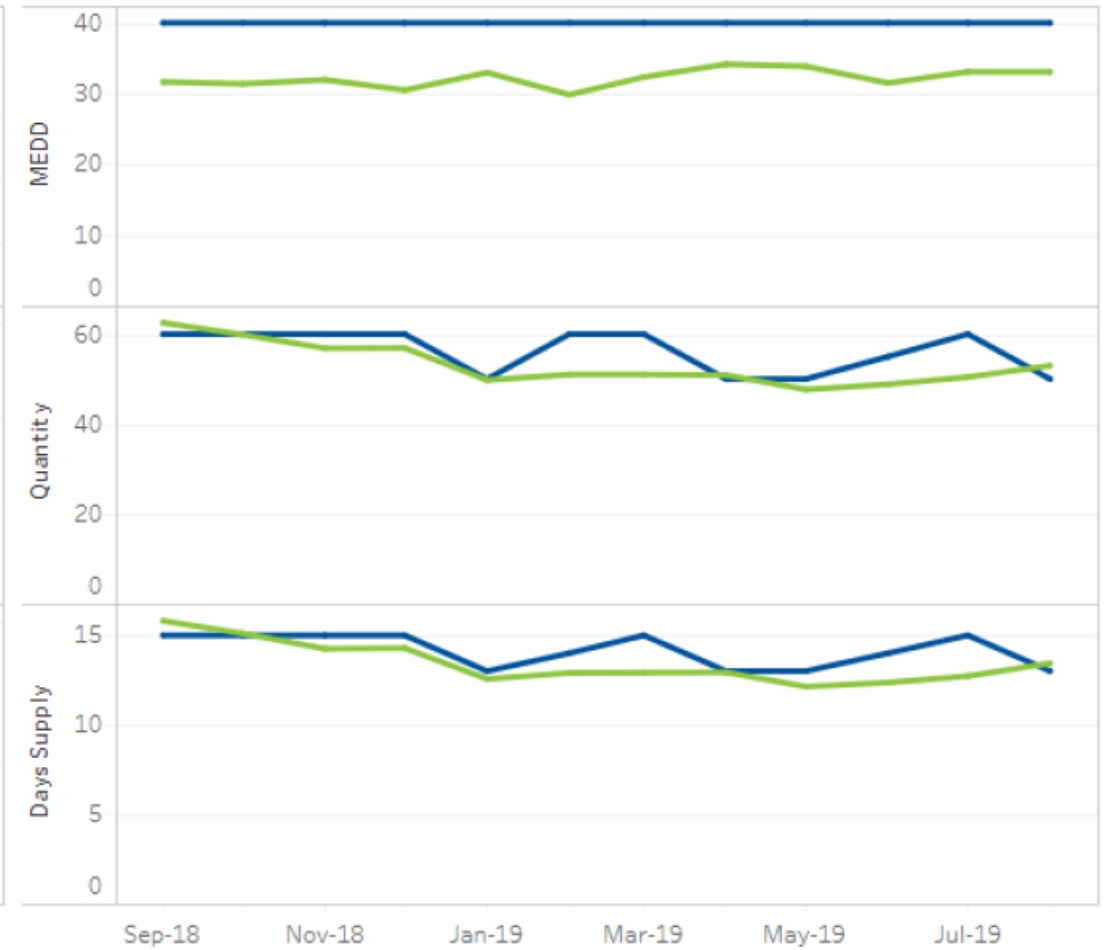
Data collected from 51 patients between 2/19 and 6/19. That data was extrapolated out to FY19 based on FY19 case load and % of pills remaining from the study

Current State

Oxycodone Metrics



Tramadol Metrics



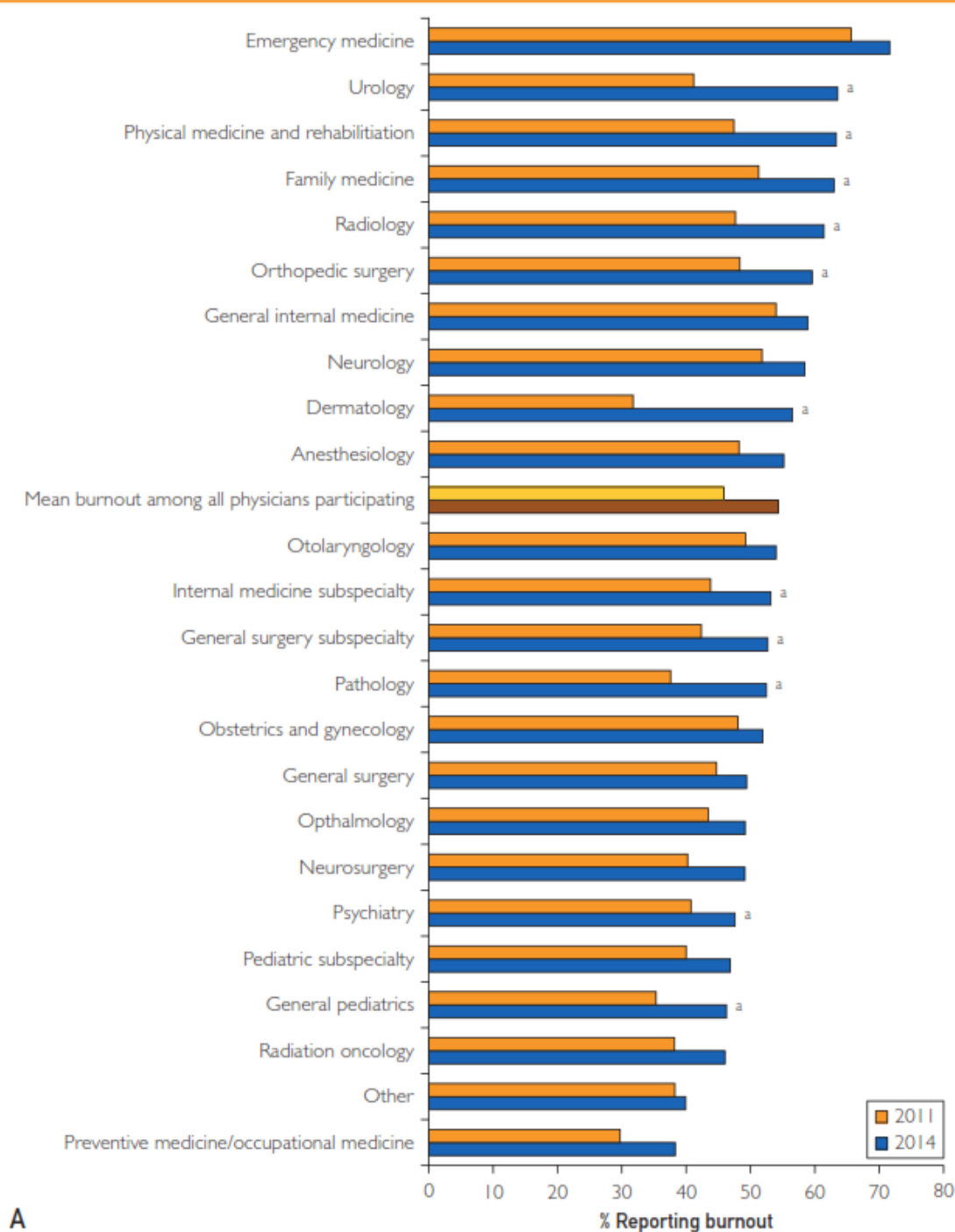
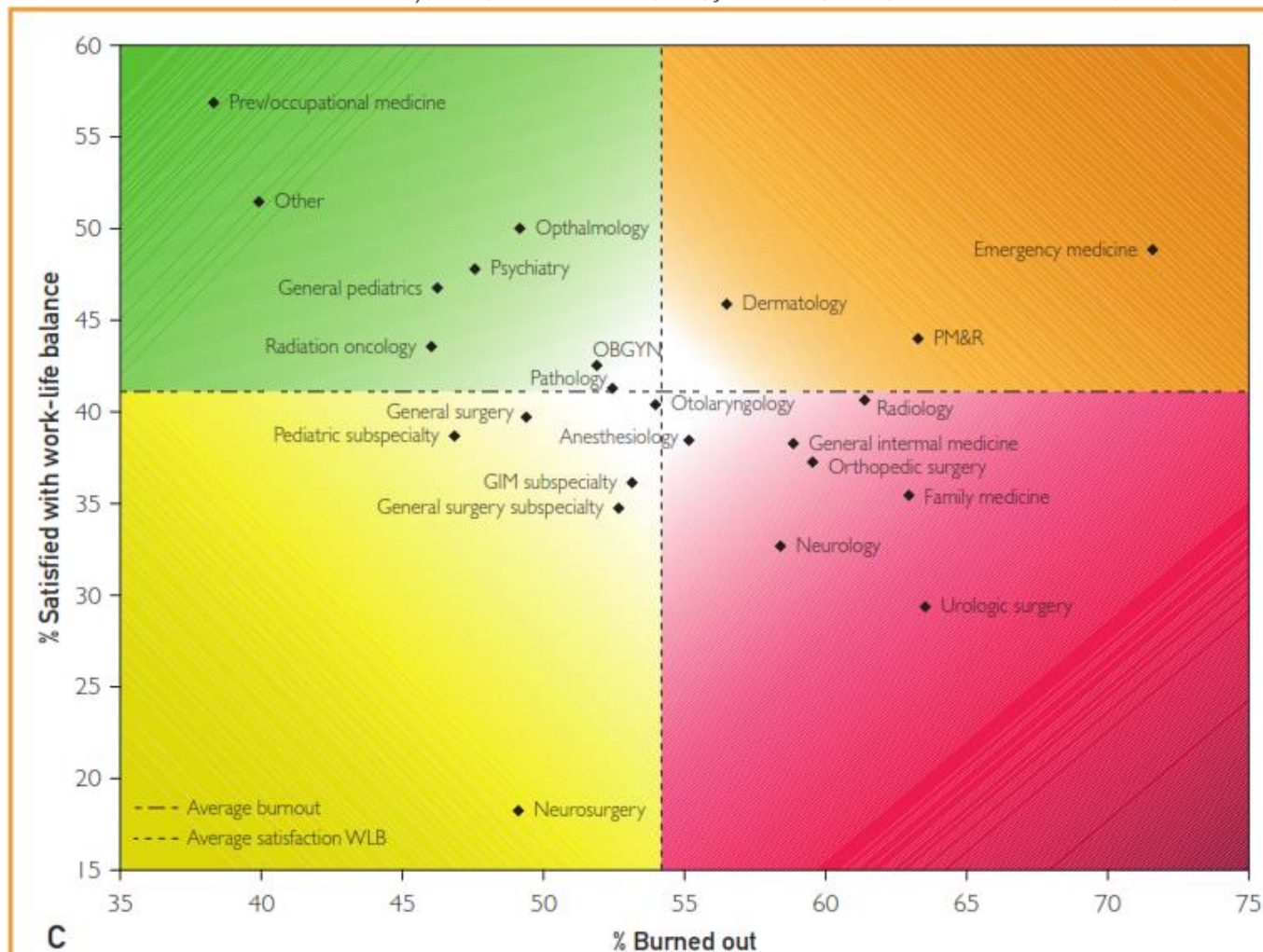
Wellness/Burnout



54% of
physicians
burned out
- 2014

Changes in Burnout and Satisfaction With Work-Life Balance in Physicians and the General US Working Population Between 2011 and 2014

Tait D. Shanafelt, MD; Omar Hasan, MBBS, MPH; Lotte N. Dyrbye, MD, MHPE; Christine Sinsky, MD; Daniel Satele, MS; Jeff Sloan, PhD; and Colin P. West, MD, PhD



Am J Infect Control. 2012 August ; 40(6): 486–490. doi:10.1016/j.ajic.2012.02.029.

Nurse staffing, burnout, and health care–associated infection

Jeannie P. Cimiotti, DNSc, RN^{a,b,*}, Linda H. Aiken, PhD^c, Douglas M. Sloane, PhD^c, and Evan S. Wu, BS^c

^aNew Jersey Collaborating Center for Nursing, Rutgers, The State University of New Jersey, Newark, NJ

36% Nurse Burnout

*“If **burnout** was **reduced by 30%** a total of **6,239 fewer infections** would be prevented in Pennsylvania hospitals, leading to a estimated cost **savings of up to \$68 million.**”*

Reduction in nurse burnout and the associated decrease in the number of urinary tract and surgical site infections and total cost savings

Reduction in burnout	Urinary tract infections			Surgical site infections		
	Infections prevented	Cost savings, low	Cost savings, high	Infections prevented	Cost savings, low	Cost savings, high
–10%	1,335	\$1,000,220	\$1,111,059	744	\$8,251,897	\$21,914,009
–20%	2,671	\$2,000,441	\$2,222,119	1,489	\$16,503,795	\$43,828,017
–30%	4,006	\$3,000,661	\$3,333,178	2,233	\$24,755,692	\$65,742,026

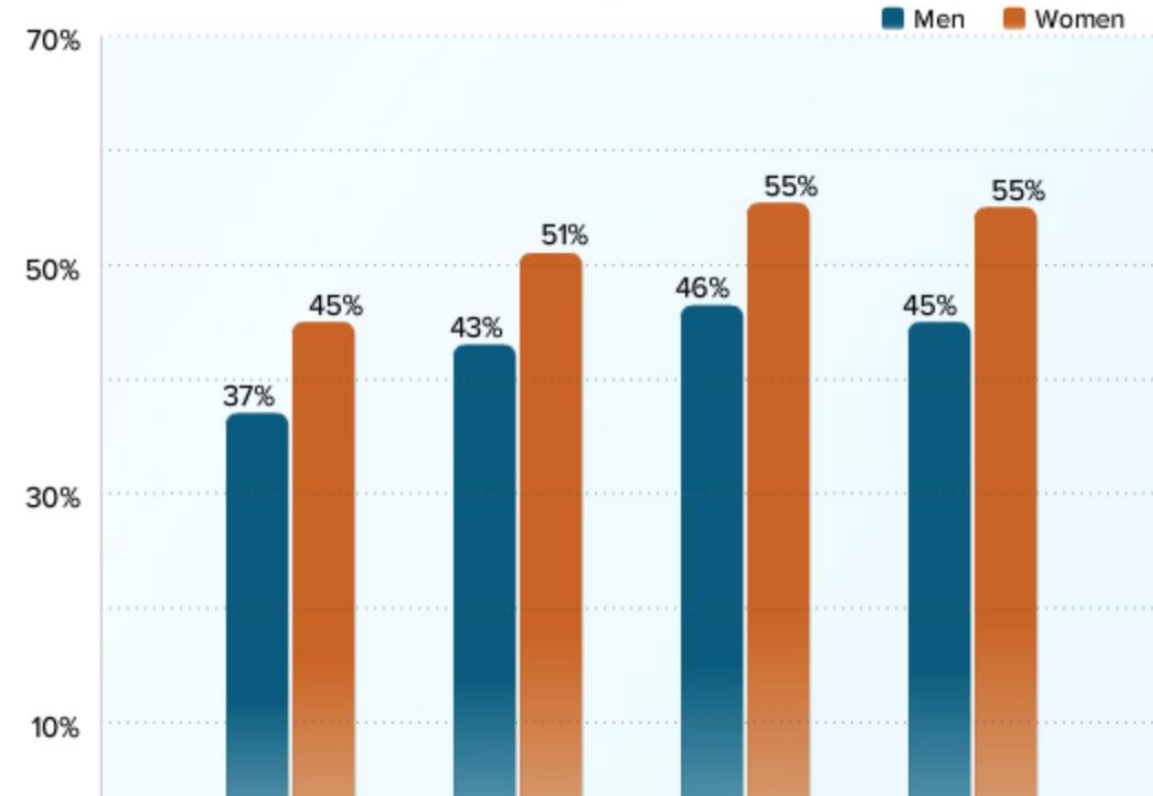
NOTE. Cost savings are reported in 2007 US \$.

Medscape

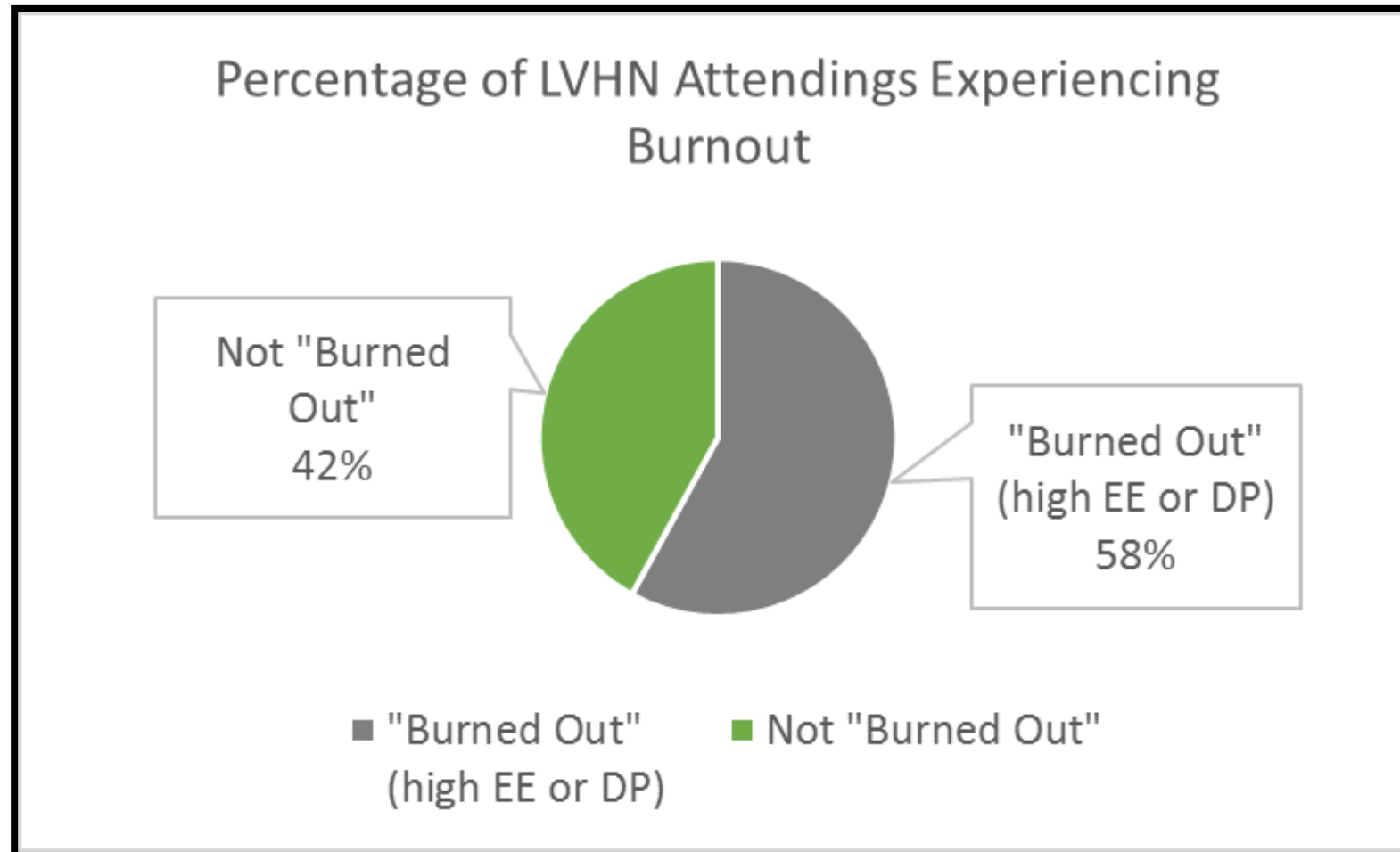
LIFESTYLE REPORT 2017

Race and Ethnicity, Bias and Burnout

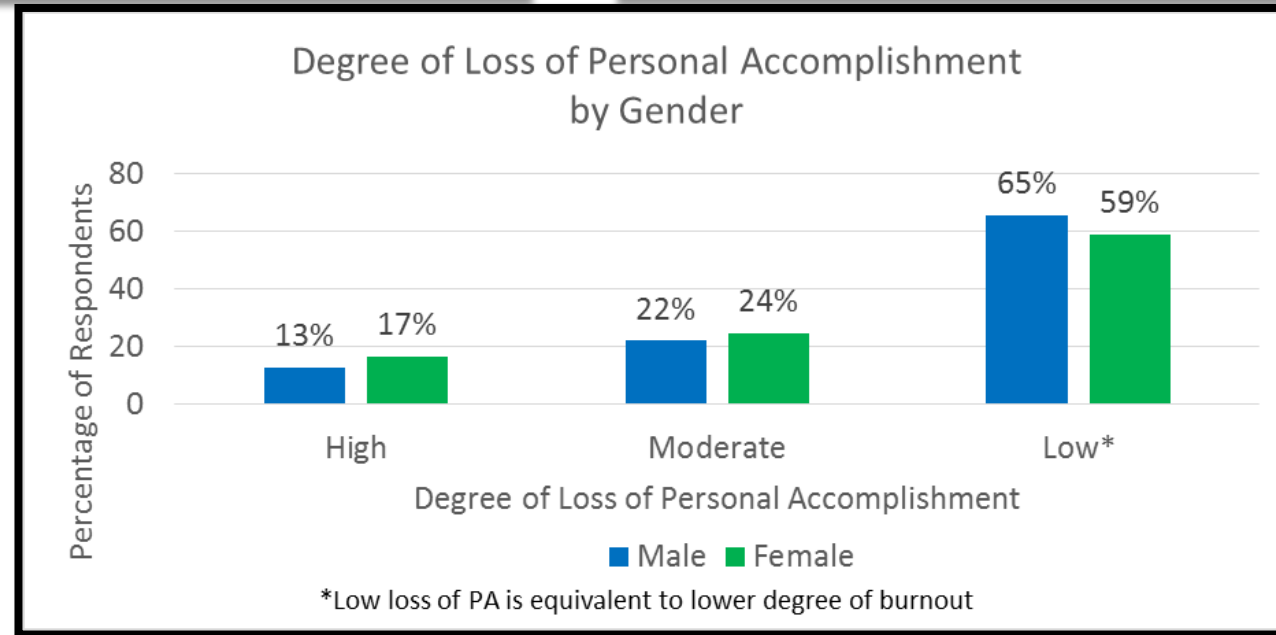
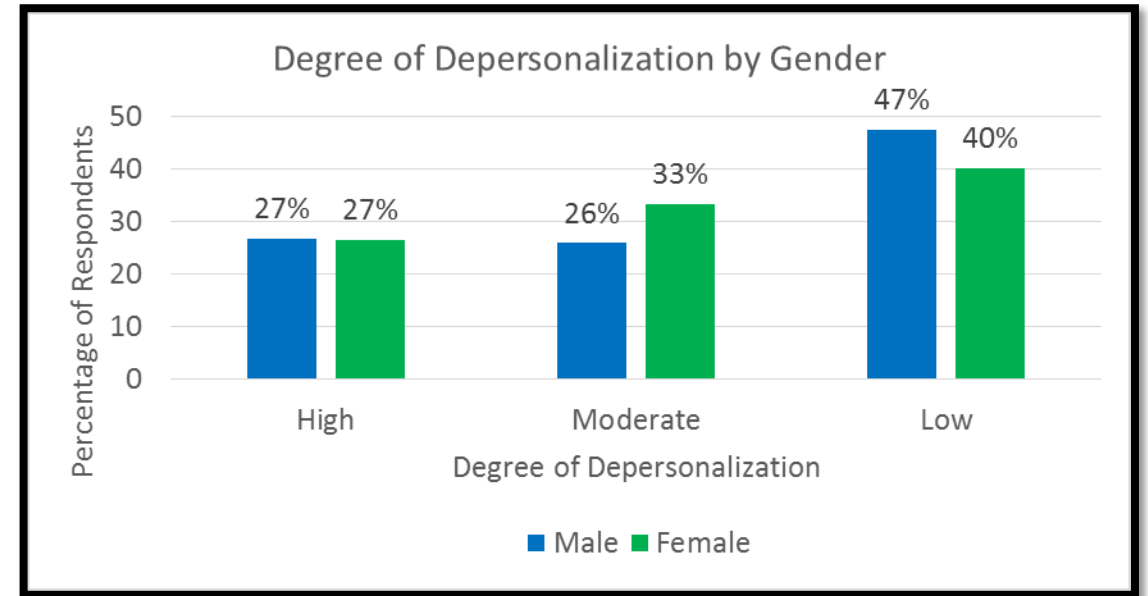
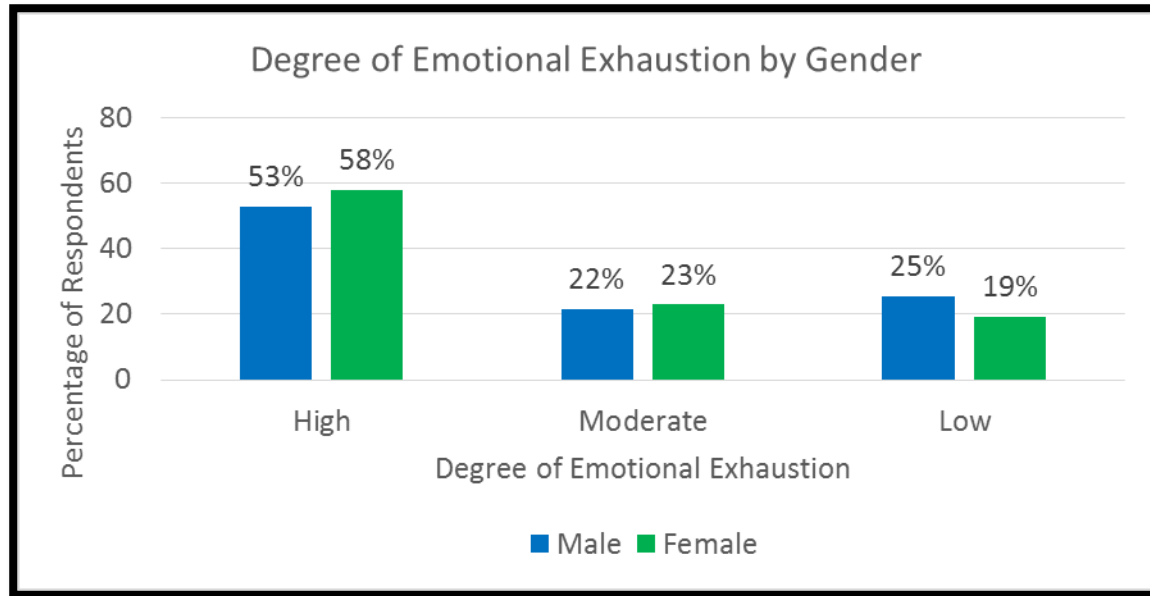
Burnout by Gender



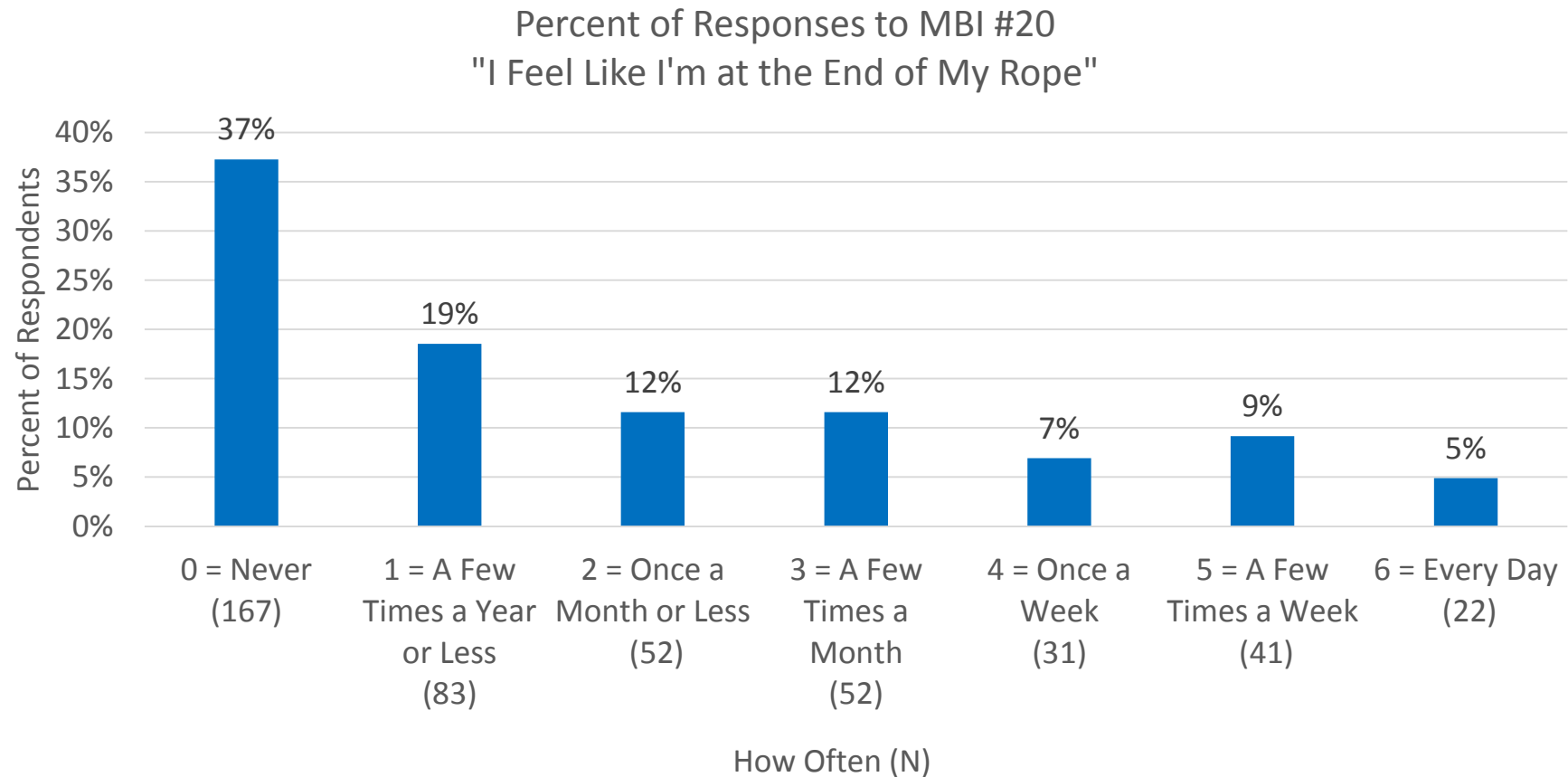
Burnout Rates at LVHN



Domains of Burnout by Gender



MBI Question Response – “I Feel Like I am at the End of My Rope”



Avedis Donabedian, MD, MPH



Healthcare is a sacred mission...a morale enterprise and a Scientific enterprise but not fundamentally a commercial one. We are not selling a product. We don't have a Consumer who understands everything and makes rational Choices – and I include myself here. Doctors and nurses are Stewards of something precious...Ultimately the secret Quality is love...If you have love, you can then work Backward to monitor and improve the system.

- Born in Beirut of Armenian decent
- the father of American healthcare quality assurance
- He escaped Armenian genocide
- Palestine
- America
 - Harvard
 - New York Medical College
 - University of Michigan

There is Nothing More *Beautiful* Than When You
Prove to Yourself *Just How Strong you Are....*



QUALITY
Patient *Safety*

#1

Infection Prevention

Regulatory Excellence

